

## LOOKING BACK: DOING END-OF-TERM ASSESSMENTS

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### Introduction

For nearly two years, Virginia Tech librarians have visited classrooms to conduct end-of-semester interviews with classes in which one or the other of them had previously conducted instruction sessions. These retrospective interviews, ranging in length from 15 minutes to nearly an hour, have had several purposes: to assess our own teaching, and to reinforce and clarify previous instruction in the students' context, with the further hope that the students will better retain what they have been taught.

While it is hazardous to generalize from a relatively small number and somewhat heterogeneous number of cases, it appears that both goals have been realized. Moreover, these retrospective sessions have provided an additional conduit for students to convey their experiences and opinions about the library in general.

In cases marked by strong collaborative relations between professors and librarians, course instructors have noted that their students' comments in "retro" interviews have affected their own teaching: "This project has increased my awareness of how much the well-planned library instruction session can enhance what's happening in the classroom," says one. Says

another: "I feel that I got about as much feedback from listening to the students as you guys did." Retros inform teaching practice and course content for everyone.

### Process

It takes two people to do a retro: the person who taught the initial sessions, serving as reporter, and an outside colleague, who conducts the interview. We believe that this is the most practical approach to our goals:

- **Participation.** The interviewer's neutrality should promote less inhibited responses for assessment purposes. Moreover, when an outsider demonstrates interest in the students' views i.e. by taking the trouble to talk on their turf, students seem to enjoy the attention and open up.
- **Perspective.** The interviewer's answers to student questions may give a new—perspective on previously covered material, while the initial instructor, answering from the back of the room, may recapitulate it. The combination raises the likelihood of student understanding.
- **Relevance.** An outsider, less familiar with the students, the previous instruction, and the class overall, may misplace emphases. On the other hand, he or she may be less likely to be sidetracked by conversations with familiar or favored students (or with the instructor).

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- **Interpretation.** As the reporter, the initial instructional librarian already has necessary background knowledge to process student comments on the fly—both for his or her own assessment and for compiling a record that can later be compared systematically with other retros or applied to give insight to quantitative data. Moreover, as a practical matter, fast, reflective interpretation is much easier to accomplish than recording or transcribing entire retro sessions: it demands less time and clerical work of librarians, protects the privacy of the interview subjects, and is less restricted by human-subjects research protocols.

Additionally, librarians and professors alike have found it very rewarding when the teaching faculty member participates, encouraging participation in the interview and inquiring about the fit between assignments, library resources and services, and course materials.

A retro interview has three major parts, though for reporting purposes, we make sub-divisions and analyses. (See Appendix A for a sample interview report, built on our standard questions.) Throughout, opportunities arise to seize teachable moments dealing with information resources, research processes, and the ins and outs of our library.

- **The warmup.** After the professor introduces us, we inform the students that our project has been approved as human-subjects research by the university, advising everyone that their response (or silence) is entirely voluntary and will be kept confidential. Our standard first question asks the class what they recall of the library instruction session(s) for that class. This initial invitation for students to reflect serves as an icebreaker more than as a definitive source of information for us. Typically a few students will hesitantly describe skills and resources addressed in the instruction session, and others will join in.
- **The diagnostics.** Most of our questions ask about problems, first with the resources and then with the research process. The slight risk that negative questions will inhibit discussion is more than offset by the likelihood that students will remember better the details of their difficulties and how they dealt with them. It has been consistently difficult for students to keep separate our question about problems with library resources and our question about problems with their research processes. Conversation often turns to shortcomings of the library that the instructional librarians present cannot,

on their own, fix, such as breakdowns in interlibrary loan or circulation/reserve, though we can suggest "work-arounds" to the students and later convey the problems to relevant library departments. We are not satisfied that our current questions adequately get to students' cognitive or conceptual difficulties with research as an activity, beyond the tools.

- **The sendoff.** While we are, after all, trying to identify and resolve problems rather than bask in warm and fuzzy glows, we recognized from the beginning of the project the importance of asking students to talk about their successes. Such stories are instances of peer instruction as well as indicators of the library's ability to satisfy student needs. We then circulate sign-up sheets to identify willing students for brief follow-up questions a semester later. Thus far, using e-mail questionnaires to find out about longer-term retention of library instruction has elicited low response rates and answers too general to be useful. Focus groups and/or more structured, written assessment instruments may be warranted.

Inasmuch as retrospective interviews are driven by the students' opinions, both the interviewer and the reporter must be flexible. While we take the same basic set of questions and reporting forms to every class, the conversations will take turns that may require us instantly to adapt our lines of questioning/answering and our reporting. The questions we take into an interview do not all get equal time nor attention. Lines of discussion will weave across the main questions, which the reporter must unravel and recombine in a record that will be a complete and rich account of every class yet also consistent enough to permit comparison. This requires a good deal of instant analysis while taking notes, which must be fleshed out—as soon as possible—by recollection and discussion while compiling the record of the interview.

Thus, when beginning a project of retrospective interviews, it is important that the interviewer and reporter be compatible, understanding both the project and one another. A team that has done a few retros can comfortably recruit others for one or the other role. We have found that it is better to break in a new colleague as the interviewer rather than as reporter: it requires less background knowledge and preparation (through discussion with the initial library instructor, based on the course profile—see Appendix B—and possibly a review of course assignments). An outsider as reporter will have difficulty sorting out the threads

of conversation and perhaps less motive to produce quickly a report that adequately represents the tapestry.

The purpose of qualitative research, such as these end-of-semester assessments, is to collect lots of information directed at answering one's research questions, to distill what is really important coming out of that data, and to communicate the findings. Student narratives about the travails of becoming more information literate can be especially helpful in telling the story meaningfully to teaching faculty and other librarians. So the reporter and interviewer must make a particular effort to capture the essence of those stories in each interview. If the thick, rich narrative is not recorded with an eye to subsequent comparison, the value of the interview is diminished: instead of documented qualitative data, one has only recollection and anecdote.

### Preliminary revelations

Because retros occur at the end of the semester, librarians and teaching faculty can get a clearer sense of the overall value of the library instruction, how it fits into the course, its relevance to assignments and projects, and to begin to understand what is really taking place with regard to student learning. When library faculty come back to a class, usually near the time when final projects are due, students do appear to reflect on what they have learned. They also try to learn more, using those moments when the librarians are in their classroom to get new information and to reflect on some of the skills that they have learned. They are remarkably unabashed expressing their perplexities, misgivings, complaints, and success stories.

Student observations made in retrospective interviews contextualize and make real—phenomena familiar to teaching librarians (though not necessary to academic faculty), which we have taken into account in subsequent instruction and collaboration, including:

- Different learning styles require a mix of instructional styles and tools, even in an active-learning framework.
- The longer the interval between the instruction session and its application in a course assignment, the worse the retention of the instruction.
- Students want worksheets and library exercises returned (if they must be turned in at all). Such written materials appear to have a mnemonic value to those who filled them out, even if the

librarian had intended them to be only one-time diagnostic tools.

- Students recognize that there is a lot to know, both substantive and procedural, to navigate today's information environment. They often express regret that they had not received information literacy instruction earlier in their careers and note connections among their library instruction sessions. Suggestions that there be more library instruction, perhaps a separate research course, are fairly common, though these appear to be rather abstract suggestions rather than expressions of real preferences for content or sequence in a program.

Even though they require half an hour or so in the most time-stressed part of the semester, retros earn their keep by creating conditions for more effective teaching. Because students in the class interviews tell their own stories about their successes and failures in researching their assignments, their professors can learn more about the variety of learning styles in their classes, the challenges and complexity of the tasks students work through, and what perplexes them even after projects are turned in.

Thus a retro gives librarians and teaching faculty the opportunity to better coordinate assignments, timing of instructional sessions, teaching objectives, and other variables that relate to library instruction. Moreover, as instances of "evidence-based librarianship," the qualitative data accumulated through a retro project may help persuade additional teaching faculty to seek library instruction and eventually join in retros or other assessments.

### Conclusion and Invitation

Because this research to date has involved only a few librarians, in a fraction of the courses in which they teach, the project has had a built-in "small-*n*" problem. That is, there simply have not been enough cases yet to warrant coding interview results for the purpose of analyzing our qualitative data in a fashion that could properly be meshed with other data, including quantitative data, whether compiled at Virginia Tech or across institutional boundaries. To the degree that other librarians pursue retros and share their results, we may hope to improve our techniques, note trends and other patterns that might be useful to instructional librarianship, to our teaching faculty clients, and ultimately to our students.

## Appendix A: Sample interview report

### End-of-term assessment/instruction interview: sp 2003

PSCI 2024: Political Science Research Methods: 11:15 section	Session date: 28 April 2003: 11:15
Prof. Craig L Brians	Anita Haney (int) / Bruce Pencek (rept)

- 1) Recollection of library session(s):
  - Jan 29 session (take-home quiz followed by instruction talk):
    - searching index (student said "search engine"[sigh]) for articles
    - remote access
    - too much attention to keyword searching [this might have meant too much attention to identifying alternative terms; on search techniques, instruction session emphasized using descriptors instead of keywords]
    - Not enough copies of the required *Economist* article [NB: library had not received hard-copy of that issue]
    - Confusion about finding that article on reserve: did not know to ask for item under prof's name rather than with citation.
  - March 14 session (database comparisons during lab)
    - Variety of databases
    - Discussion of types of articles [this was actually in first assignment]
    - Application of keyword vs fielded searching
    - Techniques to broaden/widen search
- 2) Problems using resources discussed in session:
  - Too many/too few hits
  - Journals not where catalog said they were [not clear if this was a current/bound periodical issue, a reserve issue, a missing/misshelved item issue, or misinterpretation of holdings record]
  - Worldwide Poli Sci Abstracts crashed frequently in one student's Netscape
- 3) Problems with research process (if separate from #2):
  - Circulation too picky about worn ID card
  - ILL takes too long for getting cited articles: student gave up instead
- 4) Dealt with problems:
  - Reference desk,
  - Live Ref;
  - approx 20% of students present said they'd contacted their college librarian
- 5) Remaining perplexities/misgivings:
  - Not enough library instruction compared instruction in statistical methods and tools
- 6) Success stories/advice:
  - start early
  - ask for help
  - take more citations that look good than you think you'll actually need, to leave room for missing or irrelevant ones
- 7) Willing to do followup interview? (sign-up sheet w/emails)
  - XXXXX YYYYYYYYYY <YYYYYYYY@vt.edu>
- 8) Analysis/observation (of session overall; of this session w/others)
  - Not very lively group. Only 35 students (some scheduled presenters did not show)
  - Prof. active in interview, setting context of the interview, asking questions to inform his design of class beyond library component
  - Approx half of students present said they'd had previous library instruction

## Appendix B: Sample class profile

### Library Instruction—Class Profile (Spring 2003)

<b>Class Number</b>	PSCI 2004 (CL Brians)		<b>Class Title:</b>	Research Methods
<b>Date(s) of instruction session(s)</b>	Jan 29 in lecture room; March 14 in lab rooms – no sessions in library		<b>Session evaluation tool</b>	worksheets
<b>Graduate?</b>		<b>Undergraduate?</b>	x	
<b>Level</b>	Required course for major: mostly sophomores and juniors; graduating-senior majors blocked.		<b>Std lib handout</b>	
<b>Class Size</b>	2 sections of ~65	<b>Class Format</b>	lecture + weekly lab sessions w/TA	<b>Class-specific handout</b> 1 – for use in lab sessions: use 1 of 4 assigned databases (WPSA, PAIS, Lexis Nexis, JSTOR) to search for lit. on an assigned concept pair
<b>Student project type(s)</b>				<b>Class-specific web</b>
<b>Indiv.</b>	x	<b>Small group</b>	(presentations)	<b>All-class</b>
<b>Project description</b>				<b>Other:</b> 1-- 4 of 5 questions on take-home quiz due on first session date dealt with retrieving different versions of same article
<ol style="list-style-type: none"> <li>1) Outline due in February: statistical analysis in dataset provided by prof of two variables assigned by prof., with preliminary lit review. By design, variables assigned so that no literature existed on the pairs, though there was abundant literature on each variable separately.</li> <li>2) Final project due at end of term: refine/revise theory and hypotheses, identify and use intervening variables, in view of stat. analyses and literature. Group presentations of projects performed individually.</li> </ol>				<b>Instructor characterization of student work</b> Library Research Characterization: "I teach these Research Methods in Political Science classes enrolling a total of more than 100 students each Spring. The courses emphasize marrying a literature review with students' original data analysis. The library instruction is particularly addresses the skills students will need to complete their literature reviews, particularly incorporating scholarly journal articles. Following the two librarian visits this year I have noticed a substantial improvement in student papers; they have been more successful and locating and incorporating academic research into their papers."