Treading New Paths: How Creative Collaboration Transformed Teaching the Research Process to USC Upstate’s First-Year Students

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What are the special needs of first-year students in learning the research process? How will they come to see research as a process and not a set of discrete skills? How do we as librarians make sure that our instruction session fits organically into the course of which it is ostensibly a part? These have become guiding questions for our First-Year Information Literacy Program at the University of South Carolina Upstate, a collaborative effort of the library with the Center for Student Success, which runs the University 101 freshman seminar, and the Freshman Composition sequence comprising the courses English 101 and 102. We have grappled with these questions on several levels, both practical and philosophical, and our story is one of continuing change, creative experiments, and an ever-deepening relationship between librarians and the teaching faculty.

USC Upstate is a comprehensive branch of the University of South Carolina, located in Spartanburg. The university is mainly an undergraduate institution, with a total student headcount of close to 5,000. In recent years, we have experienced rapid growth, with the freshman class expanding by an average of 50 students each year.

Our first-year program is the result of an extended collaboration between myself as Coordinator of Library Instruction, Louise Ericson, the former Director of the Center for Student Success, and Brenda Davenport, the Director of Freshman Composition. Almost from the day I arrived in July 2006, I found myself involved with one or the other in planning for fall semester. At the time, the library already had a commitment to teach library instruction sessions for University 101, English 101 and English 102. One librarian had been teaching the University 101 sessions, while the English sessions were divided among the other six instruction librarians who also taught in their subject liaison areas. But in Fall 2006, the number of University 101 sections jumped to 23, from 11 the previous year. It was clear that in our situation a single librarian would no longer be able to teach all library sessions for the course, and we agreed that it was desirable to have all instruction librarians involved with both University and English courses.

In our meetings about the library sessions that summer and fall, it became clear that Louise was concerned about more than the logistics of scheduling. She was deeply interested in how the library session was integrated into the course as a whole: how it utilized the active-learning philosophy behind University 101 and how it prepared the students to conduct research for their class assignments. She and other University 101 instructors had been disappointed at the quality of the career paper that had been the major research assignment in the course. She found herself questioning the appropriateness of a research paper without any focus on students’ research preparedness. Students needed a foundation in research by learning information literacy skills and, in the University 101 context, learning such skills would provide students with tools to complete class assignments and support work in other courses. This idea, that skills and concepts learned in one course should be visibly transferrable to work in other courses, is one that we would intentionally develop.

Brenda had been a member of the search committee for my position. She remembered how I connected the ACRL Information Literacy Competency Standards for Higher Education to the research process during my on-campus interview, and wasted no time in contacting me to discuss the
Standards when she arrived back on campus in August. During that meeting I learned that the English faculty were in the process of revising the English 101/102 sequence. What had been a first-semester “Learning to Write” course followed by a second-semester “Writing about Literature” course, was being transformed into a two-semester composition sequence. The English faculty had specifically identified the research process as something that needed to be systematically taught. As Brenda put it, she wanted to make the research process more visible to students, and thought the Standards might be an aid in doing so.

As we went through the Fall 2006 semester, I began to hear from the other librarians. Two major concerns emerged: How should the University 101 and English 101 sessions be differentiated, given the large number of students enrolled in both courses? Could we find a way to make them more distinct and not repeat information between the sessions? In this context, more weight could be given to the second concern: the amount of material we were expected to cover in a 50 or even a 75 minute period, especially with a philosophy of active learning in the first-year sessions.

It did not take long for Louise, Brenda, and I to get together to discuss our common concerns. We brainstormed, consulted with our respective departments, discussed the Standards and the research process, and, of course, kept coming back to the basic question, What are the needs of our first-year students in learning the research process?

Our answers to that question led us to restructure the program for Fall 2007 (Appendix 1). We felt that students needed to be exposed to the physical layout and organization of the library, so we developed an iPod (MP3) Library Tour with a graded assignment that students completed on their own. We wanted to differentiate the library sessions for the three courses and present a sequential development of information literacy skills, so we agreed to pre-schedule University 101 library sessions during a three-week period in September and not schedule English 101 sessions until later in the semester. This has allowed us to focus the sessions differently: University 101 is functionally an orientation session, while English 101 and 102 focus on research concepts and skills in relation to a class assignment. We also wanted students to see the applicability of information literacy skills learned in one course to work in other courses and to develop a concept of research as a process. It seemed to us that students tended to compartmentalize information literacy skills as something they used to achieve a particular end—the assignment at hand—rather than as transferrable skills that could help in analogous situations. How do we get students to see the process of research?

The research process is, as has often been said, recursive rather than linear. Circling back on itself, branching out in unexpected directions requiring new questions and background investigation, going through the various “stages” of the process at different times with different questions—these are some of the joys (and frustrations!) of sustained research. Yet, despite the messiness of the reality of research, the process of research does have several distinct stages: formulating a research question, reading background information, finding relevant sources, analyzing findings, and ending at some point with a product that presents conclusions about the research question. We believe that students need to understand this process, not merely as a recipe for writing a term paper, but as a means of investigation, analysis, and communication. It is important, therefore, that students be presented a model of research as a process.

We have chosen to use the Information Literacy Competency Standards for Higher Education as a frame for the research process. It is a remarkable articulation of that process and makes full allowance for the recursive nature of research. But the language in which the document is written, and its hierarchy of standards, performance indicators and learning outcomes is not exactly student-friendly. That is why I created two versions of the Standards adapted to our local situation: a one-page handout used to introduce the concept of information literacy to students (Appendix 2), comprising the five standards (in words adapted from the ACRL website) with examples of research activities under each, and a two-page version with student learning outcomes organized under the five standards, meant to serve as a guide to the skills we expect first-year students to attain.

If the Standards provide an overall model and framework for approaching information literacy as a process, we need to make sure that individual skills are taught in a way that reinforces the overall model and emphasizes their transferability to other situations. Our adoption of the new program solved some of the sequencing and content issues we had identified but it emphasized, more than ever, the collaborative nature of teaching information literacy. With the library session now conceived as merely one feature of a wider information literacy component within the course, it became more important for me as a librarian to know how classroom instructors were approaching information literacy concepts and skills, and how and when they were introducing specific skills. Those skills needed to be introduced and developed logically within both classroom and library components of the course. We realized, in brief, that we would need to intentionally teach any information literacy skill that we identified as basic to our program, and that we would later want to assess. For both librarians and classroom faculty, this has put the question of how to better bind the library session to the course of which it is a part in sharp relief.

For Fall 2008, we hit upon a solution for University 101. Students complete the iPod Tour before the session, so they already have a physical orientation to the library and an introduction to services. The session itself has two learning outcomes, one conceptual and one practical. The conceptual outcome is to engage in an activity that explores the idea of research in daily life in comparison to academic research in college, and is the means by which we introduce the Information Literacy Competency Standards. We created an activity to teach this outcome, “The Great Cell Phone Search,” in which students search for a cell phone using whatever resource they want, but have to write down each step of the process they follow. They then compare their steps with the one-page summary of the Standards. The goal is not accuracy so much as getting students...
to think of the process they go through, which is explored by further class discussion. The practical learning outcome of the session is to make sure that students understand how to look up books in the online catalog and find a full-text article in an article database. This is at a very basic level: keyword searching, locating books (which refers back to the discussion of classification and location on the iPod Tour), and finding full-text articles. The exercise is used to find sources for an annotated bibliography assignment that follows the library session.

This sequence—iPod Tour, Library Session, Annotated Bibliography assignment—binds the library component to the University 101 course and lays the foundation for future class assignments. With the English 101 sessions coming later in the semester, we found that the most useful goal for these sessions is to focus on developing search skills in the library catalog and finding full-text articles in Academic OneFile or Academic Search Premier. Since the English sessions are assignment-based, there is a natural follow-up, but we are increasingly feeling the need for better preparing students for the session. Because developing a topic and doing background reading belong to an earlier stage of the research process than the major focus of the library session, Brenda and I felt the need to address reference sources before her classes came to the library. We designed build-your-own-pathfinder and reference exercises to help students learn about reference sources and to better focus their topics before the library session.

**KEEPING ON TRACK**

Our collaboration at USC Upstate has taught us one important lesson: teaching information literacy is collaborative by nature. As librarians, we have come to realize that many of the learning outcomes will be taught by the University or English faculty in the classroom. We can now focus our sessions more realistically on what librarians can best offer our students, knowing, for example, that a topic like evaluating websites has been covered by the teaching faculty. We still have a way to go with integrating information literacy into the curricula of the three courses in a way that brings all faculty fully on board, but we have made significant strides in that direction and have set up processes to deepen the commitment. I think we all recognize the need to truly “talk the talk” (use information literacy terms and concepts whenever appropriate) and “walk the walk” (intentionally teach those skills we identify as important).

Our other major challenge is assessment. Up to this point we have relied mainly on the classroom faculty to judge whether students are making progress. Some include information literacy-related questions on tests and student evaluations, and have given us feedback accordingly. Librarians regularly solicit student and faculty feedback on their sessions on an individual level, sometimes sharing results, but we have as of yet no systematic way to collect program-level feedback. In Fall 2007 we surveyed students about the iPod Tour. While not exactly ecstatic about the tour, their comments were generally positive and their suggestions helped us to revise the tour for Fall 2008: reducing the overall length, number of stops, and modifying one or two problematic questions. An informal questionnaire distributed at many University 101 library sessions that fall elicited more positive comments, with many students saying that the tour had helped them get acquainted with the library.

What accounts for the success of my collaboration with Louise and Brenda? It is difficult to come up with generalizations of a specific situation in a way that might offer concrete advice to others. Obviously, communication is an essential ingredient, and so is a willingness to listen. That we shared and articulated a common set of concerns and a common goal was also important. But another ingredient was a willingness to be creative: to experiment, to come up with ideas that might not be practical or feasible at first, to engage with a spirit of curiosity, and to be able to run with ideas we thought were good. The iPod Tour is a case in point: an idea of Louise that led to a new way for students to learn about the physical library. Finally, it is important in any collaboration to have an idea of where you are going. In this sense, the three of us recognized the point at which we needed to get more people involved in planning and sustaining the program. We expanded our group to a six-member First-Year Information Literacy Advisory Committee in Fall 2008.

Any program is a work in progress. We are currently refining and changing some of what I have described, while keeping intact and building on our achievements: cross-course support, the iPod Tour/Assignment, sequenced library instruction, intentional teaching of information literacy skills, teaching research as a process, and finding new ways to bind the library sessions to the courses. Where we end up may look very different from the program as it exists today, but one thing is certain—the paths we have tread during the past two and a half years have already changed the way we teach research.

**ENDNOTES**


2) See the Standards Toolkit at http://www.ala.org/mgrps/divs/acrl/issues/infolitstandards/standardstoolkit.cfm
### APPENDIX 1: FRAMEWORK CHART FOR USC UPSTATE’S FIRST-YEAR INFORMATION LITERACY PROGRAM: LIBRARY COMPONENT

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<th>Theme</th>
<th>Objective</th>
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| University 101             | Students will be introduced to the concept of information literacy (research process), library resources, services and organization, and will be able to find a book or an article using the library catalog and databases. | • Research Process and Information Literacy  
• Library Web Pages  
• Types of Library Resources*  
• Basic Library Services*  
• Basic Searches for Library Materials in the Online Catalog and an Article Database  
*Partially covered on iPod Tour. |
| English 101                | Students will understand the stages in the research process necessary for completing a class assignment and will develop the skills needed to find and use library resources appropriate for that assignment. | • The following is a framework to be modified by the professor and librarian as necessary.  
• Research Process (Where are we?)  
• Reference Sources*  
• Finding Articles (Article database and Journal Finder)  
*May be covered by a reference assignment given before the library session. |
| English 102                | Students will refine and expand their research skills and understanding of the research process through the completion of a class assignment using appropriate library resources. | • The following is a framework to be modified by the professor and librarian as necessary.  
• Brief Review (as needed)  
• Citations, Abstracts  
• Overview of Resources for Assignment  
• Refining Search Strategies in Library Catalog and Article Databases  
• Evaluating Search Results |

**Notes**

- The library orientation session for University 101 will be preceded by an iPod (MP3 audio) tour of the library, during which students will complete a set of questions for a grade. Students will need to complete this assignment before the library session.
- Professors have the option of assigning the iPod Tour/Library Assignment to English 101 students not enrolled in University 101 before their scheduled library session.
- Professors have the option of assigning the iPod Tour/Library Assignment to English 102 students who have not had a previous library instruction session prior to the scheduled English 102 session.
APPENDIX 2: INFORMATION LITERACY STANDARDS HANDOUT

Information Literacy is . . .
- a way of defining and thinking about the Research Process
- a life skill needed for your college career and beyond
- above all, a PROCESS!

The Association of College and Research Libraries has created five national standards for information literacy, each with a series of performance indicators and learning outcomes. At USC Upstate, we have adapted the standards for use in our University 101, English 101 and English 102 classes. A summary follows; for the complete Information Literacy Learning Outcomes for Freshman Students please see the For Students link from the Library Home Page.

The information literate student . . .

1. Knows the nature and extent of the information needed.
   - Chooses and focuses a topic.
   - Develops a thesis statement or research question for a topic.
   - Reads background information on the topic.
   - Distinguishes and chooses information intended for scholarly or popular audiences published in books, journal and magazine articles, or on the Internet as appropriate to the topic.

2. Accesses the needed information.
   - Knows how to use the library catalog, article and reference databases, and the Internet to find and retrieve print and electronic books and articles, web pages, and other documents.
   - Knows how to refine searches by using subject terms, search strategies incorporating Boolean logic and truncation, advanced search screens, and other aids available in an online catalog or database.
   - Understands the organization of information in the physical Library and online.
   - Analyzes results of searches to find best information for research need regardless of format.

3. Evaluates information and its sources critically.
   - Examines and compares information from various sources to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias.
   - Summarizes main ideas, analyzes structure and logic of arguments, recognizes bias.
   - Synthesizes main ideas, reconciles differences, selects usable information from sources consulted.

4. Uses information effectively to accomplish a specific purpose.
   - Organizes paper or presentation appropriately and effectively.
   - Demonstrates whether a hypothesis is valid or a research question has been answered.

5. Uses information ethically.
   - Uses standard techniques of quotation and documentation.
   - Demonstrates an understanding of what constitutes plagiarism.
   - Follows laws, regulations, institutional policies and established etiquette in accessing and using information.