Being Accountable for Assessment: Challenges in an Information Literacy Credit Course

LOUIS USERS CONFERENCE
October 14, 2011
Angela Dunnington, Penny Hecker, and Mary Lou Strong
Sims Library
Southeastern Louisiana University
What is LS 102?

• Library Science (LS) 102: *Introduction to Information Research* is a course designed to teach the information research process. Methods for locating and evaluating sources and the creation of effective search strategies are discussed and practiced. Required exercises and assignments reinforce the course content.

• Over 1200 undergraduates per year enrolled and course is required by 50% of the academic majors at Southeastern Louisiana University.

• Eight-week one hour credit course offered in fall, spring, and summer semesters.
Timeline and Milestones for LS 102

• 1939-1949: First occurrence of credit course
• 1949-1955: Credit course was not offered
• 1955-1994: Credit course returns and is offered through College of Education
• 1994-1995: Credit course returned to Library Science Department, first LS 102 Coordinator named
• 1995-2003: Second coordinator LS 102 Coordinator named
Timeline and Milestones for LS 102

- 2001-2004: Holt Handbook adopted as course textbook
- 2002: Hybrid format added
- 2003: Third LS 102 Coordinator named
- 2008: Assessment Working Group (AWG) formed
- 2009: 100% online format added
LS 102 Enrollment 2000-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
<th>Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2001</td>
<td>1,360</td>
<td>71</td>
</tr>
<tr>
<td>2001-2002</td>
<td>1,318</td>
<td>68</td>
</tr>
<tr>
<td>2002-2003</td>
<td>1,473</td>
<td>70</td>
</tr>
<tr>
<td>2003-2004</td>
<td>1,758</td>
<td>68</td>
</tr>
<tr>
<td>2004-2005</td>
<td>1,647</td>
<td>65</td>
</tr>
<tr>
<td>2005-2006</td>
<td>1,841</td>
<td>62</td>
</tr>
<tr>
<td>2006-2007</td>
<td>1,710</td>
<td>63</td>
</tr>
<tr>
<td>2007-2008</td>
<td>1,568</td>
<td>62</td>
</tr>
<tr>
<td>2008-2009</td>
<td>1,327</td>
<td>51</td>
</tr>
<tr>
<td>2009-2010</td>
<td>1,245</td>
<td>48</td>
</tr>
</tbody>
</table>
History of Assessment in LS 102

• Developed a pre and post information literacy survey in 2004 to measure learning of selected library research knowledge and skills of LS 102 students
• Initiative for project began as the university prepared for SACS Accreditation in 2003-2005
• Used ACRL Information Literacy Competency Standards as a “blueprint” for creation of survey questions
• Assessment Working Group (AWG) was formed
Methods/Tools Used to Assess Learning

- In-Class Assignments (individual or group)
- Homework Assignments
- Final Project
- Bibliography Project
- Annotated Bibliography/Research Essays
- Midterm Exam
- Final Exam
- Quizzes
- Two-Minute Papers
- Online Tutorials
ACRL Immersion

- Participated in Assessment Program Track 2008
- Provided a conceptual foundation
- Reviewed assessment literature
- Drafted an instructional scenario for an instructional situation
- Conducted a mini-environmental scan of assessment at institution and library
- Met “movers and shakers” in library profession!
Assessment Working Group

In 2009 four of us formed a working group to explore assessment of learning outcomes in LS 102:

- Angela Dunnington (LS 102 Coordinator)
- Penny Hecker (Reference/Instruction)
- James Lovitt (Reference/Instruction—served through March 2011)
- Mary Lou Strong (Reference/Instruction)
In the meantime...

• ...while AWG considered another pre-test and post-test approach to assess LS 102 instruction
• Our administrators decided ✡ that creating a standardized final for LS 102 would
  – be a better instrument to assess that LS 102 students were meeting core competencies
  – other academic departments at SELU could identify our departmental final as documentation of expertise in information literacy and research skills
Getting Started 2009

• We revisited the ACRL IL Competency Standards for Higher Education used on an earlier pre-test/post-test assessment effort

• We selected and read literature on assessment in information literacy courses (see our bibliography on handout)

• We revisited our LS 102 core competencies
Getting Started (cont.)

• Midterms and finals from each instructor for the last full academic year were deconstructed to create an LS 102 test bank
• A document of the testing material by LS 102 content topics (e.g., databases or research strategy, etc.) was compiled
<table>
<thead>
<tr>
<th>Midterm Exam Question Categories</th>
<th>Final Exam Question Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Periodical Databases</td>
<td>Periodical Databases</td>
</tr>
<tr>
<td>Boolean Searching, Truncation, Nesting, &amp; Adjacency</td>
<td>Boolean Searching, Truncation, Nesting, &amp; Adjacency</td>
</tr>
<tr>
<td>Online Catalog</td>
<td>Online Catalog</td>
</tr>
<tr>
<td>Information Literacy &amp; Research Process</td>
<td>Website Evaluation</td>
</tr>
<tr>
<td>Research Strategy</td>
<td>Information Literacy &amp; Research Process</td>
</tr>
<tr>
<td>Controlled Vocabulary/Descriptors</td>
<td>Research Strategy</td>
</tr>
<tr>
<td>Popular vs. Scholarly Sources</td>
<td>Controlled Vocabulary/Descriptors</td>
</tr>
<tr>
<td>Periodical Evaluation</td>
<td>Popular vs. Scholarly Sources</td>
</tr>
<tr>
<td>Web Searching</td>
<td>Periodical Evaluation</td>
</tr>
<tr>
<td>Library Tours</td>
<td>Web Searching</td>
</tr>
<tr>
<td>Plagiarism &amp; Copyright</td>
<td>Library Tours</td>
</tr>
<tr>
<td>Reference Sources</td>
<td>Plagiarism &amp; Copyright</td>
</tr>
<tr>
<td>Writing Citations</td>
<td>Reference Sources</td>
</tr>
<tr>
<td>Citing Sources</td>
<td>Writing Citations</td>
</tr>
<tr>
<td>Monograph Evaluation</td>
<td>Monograph Evaluation</td>
</tr>
<tr>
<td>Research Topics</td>
<td>Classification Systems</td>
</tr>
<tr>
<td>Classification Systems</td>
<td>Government Documents</td>
</tr>
<tr>
<td>Government Documents</td>
<td>Practical</td>
</tr>
<tr>
<td>Practical</td>
<td></td>
</tr>
</tbody>
</table>
Our Approach—First Step

Over several meetings in 2009, Angela, James, Penny, and Mary Lou meet and select core LS 102 competencies

- Research Process
- Reference Sources
- Information Ethics
- Web Evaluation
- Search Engines/Directories
- Library Catalog (basic and advanced)
- Information Literacy Concepts

- Organization of Information
- Controlled Vocabulary
- Search Strategy (Boolean Operators, nested & advanced searching)
- Evaluate Periodicals (popular vs. scholarly)
- Databases (records & fields, etc.)
Finding our Commonality

- Summer 2010: Two Assessment Sharing Sessions with the reference department to discuss that AWG has been charged with creating a departmental final and to get consensus on what should be tested
  - Consensus is important to our collegial harmony and because instructors will need to alter some of their teaching emphases to prepare students for the final
Sharing Sessions

• Designed to facilitate agreement on core content and input for the standardized final while acknowledging different teaching styles

• LS 102 instructors reviewed all midterms and finals of the past academic year to explore preferred testing methodologies for standardized final
Assignment Bank on our shared drive
Organized by topic
Teaching and Testing Criteria

• After the sessions, AWG found 18 common LS 102 content areas that we termed “teaching criteria”

• After several spirited (but not contentious) meetings, we decided that the final exam needed to reflect 15 “testing criteria” of the 18 “teaching criteria”
First Draft

• Over many sessions Angela, Mary Lou, and Penny craft the first final exam draft from all of the different midterm and final exams from all of the instructors
Final Steps to launching Pilot exam

• Used feedback from reference dept. to revise first draft questions for clarity

• Created second draft (the pilot exam) composed of 20 questions for both the A & B versions
Piloted with Student Workers

• Two student workers who had completed LS 102 were administered the draft final exam.
• Timed the Test
• Met with students to get feedback
“Teach to the Test”

• Piloted in Summer 2011 with summer semester section of LS 102 students before administering to all sections in Fall 2011

• Adjusted instruction to make sure that teaching content matched the testing criteria
### Raw Data

|   | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X |
| 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 7 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 9 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 10|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 11|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 12|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 13|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 14|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 15|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 16|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 17|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 18|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 19|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 20|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 21|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 22|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 23|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 24|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 25|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 26|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 27|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 28|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**Columns:**
- A: Stu.
- B: Q: 1
- C: Q: 2a
- D: Q: 2b
- E: Q: 2c
- F: Q: 3
- G: Q: 4
- H: Q: 5
- I: Q: 6
- J: Q: 7
- K: Q: 8
- L: Q: 9
- M: Q: 10a
- N: Q: 10b
- O: Q: 10c
- P: Q: 10d
- Q: Q: 11
- R: Q: 12
- S: Q: 13
- T: Q: 14
- U: Q: 15
- V: Q: 16
- W: Q: 17
- X: Q: 18

**Rows:**
- 1: Headers
- 28: Total
Analysis of Summer Pilot Results

- Created chart from Excel spreadsheet
- Identified several questions needing clarification or further consideration
Example

First Draft

In evaluating the authority of a web site, you should look for:
(1 pt.)
• Author’s credentials
• URL that contains .com
• Purpose of the web site
• a & c

Corrected Version

In evaluating the quality of a web site, you should look for:
(1 pt.)
• Author’s credentials
• Advertisers sponsoring the web site
• Purpose of the web site
• a & c
Post-Pilot Activities

• AWG met to revise the identified questions from the summer pilot
• Revised test presented to Reference Department for final approval
• Standardized test administered to all face-to-face LS 102 sections October 10-11, 2011
• Results still being compiled
Where do we go from here?

• Continue process of more test bank questions for rotation
• Update online LS 102 course materials to reflect content of the standardized final exam
• Continue process of evaluation of the final exam for face-to-face classes
• Create departmental final exam for online classes
Questions?

I Teach...
Therefore
I Test.