Faculty-Librarian Partnership: Piloting Information Literacy Course-Integrated Instruction in Nutrition

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ABSTRACT
The concept of embedded librarianship and embedded library services have become a key topic in the literature, addressing ways in which librarians serve on research projects with faculty, deliver course-integrated instruction, and create online webpages such as LibGuides and tutorials for targeted students and classes.

This poster will address a unique course-integrated approach to information literacy that was designed for a graduate course, HNF 610: Nutrition & Fitness. It entailed the exposure of the students to five lecture and laboratory modules covering all aspects of information literacy, followed by four weeks of intense topical literature review. The students were then given six weeks to write a research paper that was delivered to their peers in a stand and deliver presentation. Time was allotted for the students to peer-review each other’s papers well before the due date.

Discipline-specific lessons were designed that addressed critical research components through active learning. Designed computer-lab time, LibGuides, and class sessions on such topics as how to search for and evaluate peer-reviewed information, how to manage bibliographic citations, and plagiarism were used to help reinforce the principles of information literacy.

100% of the students indicated that the information literacy material presented helped them to refine research topics, retrieve relevant search results, and critically evaluate information that was found.

COURSE DESCRIPTION
A graduate course focusing on the relationship of nutrition to overall fitness. The class met once a week in the evening for three hours. In the fall of 2010, the class had 14 students enrolled, a mixture of Human Nutrition, Animal Nutrition, Public Health, and Athletic Coaching majors. In addition to the content lectures, students were assigned a 2-page paper that required 20 references, and a 4-page critical thought paper due at the end of the semester.

IMPLEMENTATION/METHODS
After the first hour of class, which was based on a review of the previous week’s content and new content delivery, the teaching faculty allowed the librarian 30-45 minutes during the first 5 weeks of class to present and demonstrate the following topics:

Week 1—Orientation
- What is information literacy?
- Introduction to the class LibGuide
- Information Literacy Searchpath Tutorial was assigned as homework

Week 2—Thinking Critically and Reflecting on the Research Process
- Framing Research Questions; Using PICO
- Evidence-Based Research
- Evaluating Articles

Week 3—Searching & Retrieval Skills; Successful Literature Reviews
- Tips and Tricks for Searching PubMed & EBSCO Databases*
- Using MidPath and Database Thesaurus for Search Terms
- Find it @ WVU
- Using information resources to keep current in one’s field or discipline*
- Using RefWorks to collect citations in folders*

Week 4—Resource Evaluation Skills
- Tools for Evaluating Websites*
- Evaluating Research
- Using Web of Science and Google Scholar for Citation Searching
- Using Journal Citation Reports to determine impact factors of journals

Week 5—Ethical & Legal Use of Information; Academic Integrity & Plagiarism
- ULIB 101 Plagiarism Slided
- Plagiarism online tutorial and quiz
- Using RefWorks Bibliography/Citing Features*
- * Most highly-rated topics by the students

An hour was allotted after these lectures to allow the course instructor and the librarian to observe and assist students as they worked through the stepwise assignments using the new course content and IL concepts, while achieving progress on their literature reviews and research papers.

The class LibGuide included pages for every major information literacy topic discussed; PowerPoint slides used in class were also posted to it.

EVALUATION
Week 1: A pre-survey seeking baseline information, as well as the Research Readiness Self-Assessment (RRSA), were administered. Students were also assigned the Searchpath IL tutorial/quiz.

Week 5: Students took a Plagiarism quiz

Week 8: An open-ended survey seeking student feedback on the impact of the IL modules was given.

Week 15: A post-evaluation was given to compare against the baseline. Deadlines for literature review papers, including topic outline, showing of references, papers well before the due date.

CONCLUSIONS
- Although 100% of the students rated themselves as very or somewhat confident in their research abilities at the beginning of the semester, this didn’t match with their actual knowledge and skillset to retrieve peer-reviewed research findings.
- Lecture and laboratory combination seems to be a perfect match to reinforce IL principles and achieve content learning in unison.
- Tight/concise literature reviews take time and planning. Using class time to force respective learning while professors are observing moves the students into a new realm of resources management.
- Research paper writing should be stepwise with mini-deadlines in place. Using an integrated course design guides students to learn this process.
- 100% of the students indicated that the information literacy material presented helped them to refine research topics, retrieve relevant search results, and critically evaluate information that was found.

COMMENTS FROM STUDENTS
"Learning how to get databases to email you new papers concerning topics you are interested in will be useful later on after this class is over."

"I learn by doing, so reviewing the process in class was helpful. Leaving time at the end of class to do our research is great to practice what we learned in class."

"I think that learning how to use RefWorks has been one of the most useful things we have been taught."

"The class LibGuide helped a lot!"

"Gave me the tools I need, such as the hints for PubMed, instead of just looking at Wikipedia for everything."

"I now know how to use other search engines and scholarly journals instead of just typing it into Google and hoping for the best."