

University Libraries

Health Sciences Library, West Virginia University, Morgantown, WV

Farsighted Vision: Incorporating Information Literacy into Health Sciences Curriculum

Purpose: The West Virginia University Libraries undertook an Information Literacy Course Enhancement Grant Program, a collaborative effort between the Libraries and the Provost's Office, to focus on fulfilling the University's 2010 Plan for information literacy to become a curriculum component across all disciplines.

Setting/Participants: In the summers of 2009 and 2010, the WVU Libraries awarded several Information Literacy Course Enhancement Grants. Three of the successful applicants were teaching health-related courses: *Nursing 715: Scientific Underpinnings, Human Nutrition & Foods 610: Nutrition & Fitness, and Exercise Physiology 370: Writing for Exercise Science.* The Nursing class was completed in 2009; the other classes are being taught during fall semester 2010.

Methods/Brief Description: Health Sciences librarian liaisons were teamed with these teaching faculty to design discipline-specific lessons that addressed critical research components through active learning. Different methods were used depending on the class. Since the Nursing class was offered through distance education, online tutorials and message boards were featured. The other courses used designated computer lab time, LibGuides, and class sessions on plagiarism, how to search for and evaluate information, and how to manage bibliographic citations to help reinforce principles of information literacy.

Results/Outcome/Main Findings: The Nursing class completed in 2009 provided many positive comments on the benefit of the information literacy content and having access to the librarian for questions. The poster will display results of the pre-information literacy survey and mid-semester subjective results for the Nutrition and Exercise Physiology courses.

Evaluation Method/Conclusions: Students in the Nursing class informally evaluated the information literacy component via a student reflection at the end of the course. The other courses are using a pre- and post-survey to evaluate the effectiveness of the information literacy component.

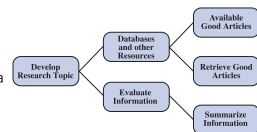


EXPH 370: Writing for Exercise Science

In the Fall 2010 semester, more time was devoted for library demonstrations in the three sections of Exercise Physiology 370 which have a total of 76 students. In the first session, the concept of information literacy was introduced, and a concept map illustrated the process of locating reliable resources. The faculty member commented that this added more substance to the instruction and more time for the students to ask questions. Students completed a pre-assessment survey, a post-assessment survey will take place at the end of the semester.



A LibGuide for Exercise Physiology was created together with a Camtasia recording (*PubMed for Exercise Physiology*). <http://libguides.wvu.edu/exercisephysiology>. The LibGuide includes the PubMed recording, Power Point slides (*Using Illiad*) on the use of WVU's interlibrary loan service, plus information on basic library services, plagiarism, research, links to web resources, and the Searchpath Tutorial. Tours of the Health Sciences Library were provided for each section of 370.



Demo 1 included:

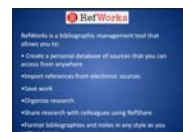
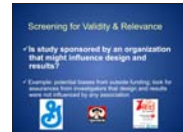
- Introduction of the concept of information literacy
- Evaluation of web resources
- Scholarly vs. non scholarly article
- Using library resources
- Basic searching in PubMed
- EBSCO databases
- Using Illiad

Once the students received approval for their topics, two Library Labs were held for each section. Students worked on their assignments in the Learning Center computer lab with the librarian nearby to assist them as needed. In this way, they were able to ask specific questions related to their topics.

The second demonstration included:

- Advanced Searching in PubMed
- Using RefWorks
 - importing references from PubMed & EBSCO databases
 - creating a bibliography
 - Write n Cite
- Important databases (Web of Science, Science Direct, and government documents)
- Discussion about the LibGuide

HN&F 610: Nutrition and Fitness



Course Description: A graduate course focusing on the relationship of nutrition to overall fitness. This class meets once a week in the evening for 3 hours. In the fall of 2010, this class had 14 students enrolled, a mixture of Human Nutrition, Animal Nutrition, Public Health, and Athletic Coaching majors. In addition to 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.

Class LibGuide: <http://libguides.wvu.edu/HNF610>

Information Literacy Objectives for the class: Understand the context of information resources, and use information research tools to obtain information. This requires the student to be able to:

- Understand the process of peer-review/scholarly information production and the structure of a scholarly work
- Use evaluation techniques to access the Web and other multidisciplinary resources to explore the shape and context of a topic.
- Develop a manageable thesis statement and formulate questions based on the information need.
- Efficiently and thoroughly navigate information retrieval tools.
- Follow the conventions for ethical and legal citation of the ideas and works of others.

Information Literacy Strategies:

Librarian created LibGuide for the class that included pages for every major information literacy topic discussed. The teaching faculty allowed the librarian 30–45 minutes during the first five weeks of class to present 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 to frame questions Evidence-Based Research Evaluating Articles

Week 3—Searching & Retrieval Skills: Successful Literature Reviews

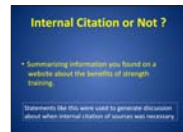
Tips & Tricks for Using PubMed and EBSCO Databases Using MeSH and Thesaurus for Search Terms Find It @ WVU Using information resources to keep current in one's field or discipline Using RefWorks to collect citations in folders

PowerPoint slides from each of these sessions were posted to the class LibGuide.

During each of these class periods, time was allotted after these lectures to allow the students to practice what had been presented, and both the instructor and the librarian were available to answer individual questions. Time was also allotted for the students to peer-review each other's papers well before the due date.

Most highly-rated topics by the students:

- RefWorks
- Tips & Tricks for Searching PubMed
- Tools for Evaluating Websites
- Tools for managing information effectively and keeping up-to-date in area of interest



Nursing 715: Scientific Underpinnings for Practice

Course Description: Nursing 715 Scientific Underpinnings is a three credit doctoral nursing course that is taught in a synchronous and asynchronous format. It provides an understanding of the scientific underpinnings of the application of theory to health care at the highest level of advanced nursing practice. Course Objectives: The objectives of this course are to prepare students who will perform at the highest levels of nursing practice. This course will examine the historical and scientific underpinnings that reflect the complexity of practice at the doctoral level including human biological and psychosocial responses, genomics, the science of therapeutics, and the conceptual foundation of nursing.



Starting with the first class, the topic of Information Literacy was introduced as an integral part of the course.

Objective 1—Developed an online library orientation specific to the needs of the distance education student. (Eligibility, MountainLynx, iLLiad, eReserves, etc.)

- PowerPoint on Searching MountainLynx (the online library catalog)
- PowerPoint on Step by Step Guide to Getting Journal Articles: Searching for Articles on a Topic
- Developed a LibGuide for the class <http://libguides.wvu.edu/content.php?pid=30315>

Objective 2—Participated in the class discussions and answered library/research-related questions

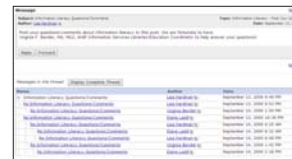
- eCampus (an online course management system)
- When students click on "Information Literacy" they are able to post their questions about information literacy to the faculty and librarian. The librarian has access to the course and could identify when questions had been posted so she could respond.

Objective 3—Provide students instruction on searching databases and periodicals specific to the needs of the student and program. (CINAHL, Cochrane, RefWorks, etc.)

- CINAHL tutorial
- RefWorks tutorial
- PowerPoint on Searching PubMed

Student Evaluations

An informal evaluation of the introduction of the information literacy content was completed via a student reflection at the end of the course. Several students commented on the benefit of the information literacy content and access to the librarian.



Comments from Students

"In both demos, I really learned a lot. The librarian gave us an in depth tour through PubMed and also RefWorks. Since I have never had anyone show me how to use the online databases, the librarian's demos are really helpful in my research for this class."

"It was pretty great being shown the ropes of all the databases. It saved me a lot of aggravation and bumbling about."

"The most significant things I learned in the library was basically how to navigate around the databases, and learned a lot of things the WVU Health Sciences Library had to offer. It's very helpful to have these library workshops because most of us are juniors or seniors that haven't taken an English class/written a paper this extensive since Freshman year."

"I now know if I have a question, the librarians are readily available via web, instant message, and in person at the library."

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

"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."

"The class LibGuide helped a lot!"

"I have developed many new skills. This is the first time I have ever used PowerPoint, sent attachments, used Microsoft word, used online library services, and used eclass."

"Going on-line to all the various databases available to us through the WVU library system was a great learning experience for me. I definitely plan on utilizing some of the different theories into my practice..."

"My computer skills have been strengthened by our course assignments. Navigating through the library resources has been challenging and at times frustrating. I can say at least I am not where I used to be in the learning curve. I am getting better. The homework exercise at the beginning of class was beneficial. I have much more to learn and I am ready!"