

Biology 255: Animal Nutrition and Metabolism

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Project Statement

The proposed project was designed to develop information literacy skills for students in Biology 255, Animal Nutrition and Metabolism. A requirement for this course was for students to produce a topic paper, on a nutritionally specific topic (their choice), not to exceed 10 pages, and that utilized primary scientific literature as the basis for information acquisition and citation. I provided students with four pages of topic paper guidelines and assisted in their literature search and acquisition strategies. I began the topic paper process the first week of classes and the paper was due at the end of the semester, leaving them adequate time to plan and act towards primary goal: Student recognition and identification of various forms of literature formats, and differentiating and using primary sources in the experimental sciences. It was my hope that this project resulted in an information literate student that evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

During the course of the semester, students received instruction on "Plagiarism" and "Primary Scientific Literature: Tips/suggestions for Improving Comprehension" and handouts were provided (See attached copies). We received information literacy presentations by Betsy Moylan, including instruction and handouts that focused on identifying and searching for types of literature available in libraries. Ms. Moylan also assisted individual students in researching their topics. We also received a special session on plagiarism and "turnitin" by Katie Duke. MS. Duke also allowed the class participants to enroll and use "turnitin" for drafts and the students had to turn in their final paper to "turnitin".

Results

The results indicated that students gained a better understanding about scientific literature, that scientific literature exists in a variety of types and formats, and there are numerous potential sources for acquiring such literature. Most students learned that scientific information can be formally and informally produced, organized, and disseminated. They recognized that knowledge can be organized into disciplines and sub-disciplines that influence the way information is accessed. Especially important was the recognition and utilization of the purpose and audience of potential resources, particularly, popular versus scholarly scientific literature. In this regards, the papers produced this year in Biology 255 were much better organized and written than papers in years past when Information Literacy was not a part of the course. These statements are backed up by numerical evaluations. Students answered 7 additional questions on their course evaluations directed towards evaluating the Information Literacy component of Biol. 255. These results are also attached in a file named "course eval info lit bio 255".

Additional questions asked on **Biol. 255 Course Evaluations (Spring 2005)** with numerical average ($n = 18$) of scores of respondents following the question.

Learned to identify a variety of types and formats of potential sources for information. 4.11

Learned how information is formally and informally produced, organized and disseminated.

4.06

Gained a broader understanding of how information is organized into disciplines that influences the way information is accessed. 4.11

Identified the purpose and audience of potential literature resources (e.g., popular versus scholarly, current versus historical). 4.11

Learned differences between primary and secondary literature sources, recognizing how their use and importance vary between disciplines. 4.28

Learned that information may need to be constructed with/from data from primary sources. 4.56

Identified the value and difference of potential information sources in a variety of formats (e.g., multimedia, database, web sites, journals, books). 4.56