

Maximizing Audience and Student-Perceived Relevance: Teaching Information Fluency in Introductory Biology Courses

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The goal of this project was to create Blackboard –based modules that introduce students to information fluency skills. By integrating the exercises into the laboratory component of an introductory biology course and carefully choosing examples that provide connections between the IF skill, class and laboratory materials our hopes are that the students will see the relevance of the skills and, therefore, remember them and utilize them in upper level courses.

Throughout the grant period many objectives were achieved. Our planning group, including a biology professor, specialist in instructional technology, science librarian and undergraduate student, opened a free and continuing dialogue about Information Fluency, the resources available and those under development. As a team we researched each of the six proposed modules and prepared materials covering topics ranging from database searches to critical reading of webpages, and from proper discipline-specific citations styles to reading of scientific articles. Karen Bernd, biology professor, attended a workshop that introduced Blackboard and, working with Mur Muchane, became proficient in the use of both Blackboard and Macromedia Dreamweaver/Fireworks. Since then she has integrated these technologies into *all* of the courses she teaches, both at the level of delivering course materials and requiring students to prepare materials using these programs.

The first module implemented in the Introductory Biology Course was a survey of student's comfort level and proficiency with information fluency skills. This module provided evidence indicating the materials that we suggested as important to address were not areas in which students demonstrated deficiencies. Students demonstrated a number of things that were not predicted. They were both much more comfortable with using technology and much more naïve about critically reading it, than was predicted. Given these results, the modules themselves needed to be revised in order to be effective. In some ways these results were heartening as they provided student input supporting the need for this type of instruction. The '2.0' generation is being developed with the goal of implementation in the Spring 2003 semester.

An additional objective of this project was also met, namely the initiation of a discussion of information fluency within the biology department and the campus at large. The biology department visited this topic on two occasions. The first was a presentation introducing the initiative at our monthly departmental meeting followed by an exchange of emailed responses and comments. The second was a short morning workshop held seven months later as part of our yearly departmental retreat. Both meetings included a discussion of ideas and approaches used across the department's curriculum. During this time Frank Molinek also began holding 'remote library office hours' in the biology department. In this capacity Mr. Molinek is physically available to help students perform database searches and aid the development of their library research techniques.

Information Fluency discussion was introduced to the Davidson College Campus through a series of on campus presentations. In March 2002 Karen Bernd presented a Teaching with Technology presentation entitled "Information Fluency: Click early and often". In May 2002, Bernd presented her experiences using the Blackboard portal system at a Blackboard: Technology Showcase. Finally in September 2002, Mur Muchane was the feature speaker at a Technology and Teaching talk at an AAG Brownbag lunch series. His presentation was again showcasing the use of Information Fluency techniques and also included a short video clip of an interview with Bernd.

Through these efforts the grant has added a loud voice to a campus wide discussion of the appropriate use of technology in the classroom. While the IF modules will not contain the information that was originally proposed, the process of developing them with student input will lead to a much stronger and pedagogically effective end product.