



Leaders in Information Literacy Grants Program

Application 2008-2009 Academic Year

Proposals for Fall 2008 are due **October 6, 2008.**

Please complete the following information and submit it either by email or regular mail to:

QEP Steering Committee
 Dr. Marina Slemmons & Dr. Ross Alexander
mslemmons@ngcsu.edu or rcalexander@ngcsu.edu
 Room 368, Library and Technology Center
 North Georgia College & State University
 Dahlonega, GA 30597

This is a Word form and you can type only in the gray boxes. The box will expand to fit what you type. You can cut and paste into the gray box from another document if you wish. Only applications submitted in this format will be considered.

Name: Dr. Karen Briggs		Date: 10/09/08
Department: Mathematics and Computer Science	Telephone: 706-867-3539	Fax: 706-864-1678
Email address: kbriggs@ngcsu.edu		
Title of Project: Statistical Literacy Project: Identifying and Evaluating Statistics Found in Popular Media		

Please address the following criteria. Your replies should be complete, yet succinct. Please limit your response to approximately 500 words total.

1. Briefly describe your information literacy project – including how student learning will be enhanced. Include information on which group(s) of students your project will benefit. Include an approximate budget and examples of materials, texts, assignments, and other elements of the project.

If Mark Twain correctly equated “damn lies” and statistics, the reason is the lack of society’s information literacy for statistics. Our development of Statistical Literacy Projects (SLP’s) includes two phases. During the Fall 2009 semester, approximately 15 students enrolled in Dr. Robb Sinn’s Math 3350 course will help beta test the SLP’s. The following semester, four top-achieving students will serve as undergraduate teaching assistants for Math 2400 students who will undertake the SLP’s (Spring 2010).

The SLP’s require students to evaluate the validity of statistical arguments that appear in current popular media articles. Students will:

1. Find a popular media article of personal interest that reports statistical conclusions.
2. Use library resources to obtain the research article(s) cited.
3. Provide a written analysis that:
 - a. contrasts the conclusions reported in the media article versus the research article.
 - b. uses class concepts to evaluate the validity of the statistical argument reported in the media article.
 - c. reflects upon how the process of gathering relevant information and using statistical knowledge has changed/strengthened the student's opinions and values.

During the Spring 2010 semester, at least three sections (approximately 125 students) of Stats 2400 will use the SLP's. Four students from the Math 3350 course (each of whom will receive a \$100 stipend) will hold 10-12 office hours to assist the Math 2400 students with their research. The remaining \$600 will support a subscription to the MAA's Special Interest Group on Statistics Education and travel funds for me to present the results to other teachers of college statistics courses.

2. List the student learning outcomes and describe how the five Information Literacy Outcomes will be addressed.

The student learning outcomes include the ability to:

1. determine instances of popular media outlets citing statistics-based research studies related to an issue of personal interest/value (KNOW, ETHICAL/LEGAL).
2. access and evaluate the research cited (ACCESS, EVALUATE).
3. analyze the validity of the original media outlet story and connect to personal value system (USE).

3. How will you assess the effectiveness of your project? Some detail about assessment methods or tools is desirable.

Students will successfully locate a "popular media / research article" (PMRA) pair and provide a written analysis. The written analysis will include evidence that the student delved deeply enough into the research literature. An additional in-class analytic writing assessment will allow students to discuss the validity of an instructor-chosen PMRA pair.

Measurable dissemination outcomes accompany the student learning goals. The method and outcomes of the SLP's will be presented at a colloquium sponsored by the Mathematics Department and co-hosted by the Math Club. This will allow 5 – 7 college instructors and nearly a dozen future high school mathematics teachers to be exposed to the collected teaching materials. These materials will also be presented at a regional or national conference.

4. Discuss briefly how information literacy complements your personal teaching philosophy.

My teaching philosophy is centered on the belief that students will become more engaged in the learning process if I can make the material matter to them. This particular project complements this philosophy since students will apply the statistical concepts they learn in class to some real-world study of personal interest to them. Further, by incorporating real-world data and current articles in the media, I hope to dispel the notion that "you can prove any 'damn lies' you want to" with statistics.

5. *Indicate how you will use the award to support your project or to further your professional development, or both.*

\$400 will provide stipends for the 4 undergraduate teaching assistants who will assist with the second phase of the project. The remaining \$600 will support a subscription to the MAA's Special Interest Group on Statistics Education and travel funds for me to present the results of the SLP's to other teachers of college statistics courses.

Appendix

The following Information Literacy Student Outcomes are referred to in the preceding document by the identifier in all-caps.

1. **KNOW:** The information literate student determines the nature and extent of the information needed.
2. **ACCESS:** The information literate student accesses needed information effectively and efficiently.
3. **EVALUATE:** The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.
4. **USE:** The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.
5. **ETHICAL/LEGAL:** The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.