

Centenary College Information Fluency Project: A Full Campus Approach

A Final Report to the ACS

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Introduction and Summary

In the spring of 2002, the Associated Colleges of the South awarded a grant to Centenary College of Louisiana to strengthen information fluency (IF) among its first year students and to continue support of the previous year's IF offerings. In addition, the grant provided funding to broaden the scope of Centenary's IF initiative beyond the students of the first year experience classes (FYE). A new course, "Introduction to Digital Communications" (Communications 180), was taught for the first time. Materials were developed for a new course in knowledge management (KM). Finally, a flash based heuristic program (REACH) was developed to help all levels of students explore topics for argumentative research papers as well as effectively evaluate and summarize research sources.

Project Narrative and Conclusions

Continuing the strategy of the previous year, we placed a strong focus on first year students in the FYE program. In doing so, the entire student body at Centenary will have been exposed to IF by the end of the 2004-2005 academic year.

Based on feedback from the previous year, we made an attempt to alter the manner in which IF was integrated into the FYE classes. During the previous year, one public presentation was made to all FYE students and faculty during a weekly convocation. This provided an opportunity to instruct students on searching and assessment strategies and to draw attention to the IF web site. Although considered successful, the final assessment of the 2001-02 IF component of FYE provided additional insight. According to the report, "most students in three different groups were able to recall 1 or 2 useful ideas [or] techniques that they learned during the IF convocation and were able to articulate how they used these techniques or ideas." However, faculty teaching in the FYE program took little ownership in the IF initiative, and few students or faculty had utilized the tutorials or other resources of the IF web site.

As a result, in the fall of 2002 we proposed a series of "hands-on" IF workshops, led by IF team and/or FYE professors, and utilizing the tutorials in the IF website (www.centenary.edu/if). It was felt that by giving the FYE instructor responsibility for guiding the workshop and enabling input on workshop content, faculty ownership in the IF initiative would be enhanced. Further, the user-friendly design of the IF website, while underutilized, provided exercises and tutorials that required little added instruction. For those faculty who preferred not to instruct the workshops, members of the IF team volunteered to facilitate.

Since the spring semester of FYE course centers around developing research skills and assessment of resources, IF plays a major role in the course goals. The proposal (see attached copy of proposal) was given at one of the weekly FYE faculty meetings. FYE faculty expressed interest in the workshop and asked questions about how it might be placed in the course syllabus. Timing within the course seemed to be the primary concern. Other questions were directed as to how the workshop would fit into the FYE curriculum and the availability of IF team leaders for workshops. All of professors on the FYE team indicated an interest in employing a portion of or the entire proposed workshop into their course.

* The following faculty members were participants on the grant team: Chris Martin, Greg Van Hoosier-Cary, Bryan Alexander, Eric McIntyre, Nathan Thomas, Eric Nunn.

The success of these workshops was determined by FYE faculty members' observations of students' IF skills in both class discussion and written assignments during the period after the workshop through the end of the semester. Verbal student feedback from the session itself was also taken into consideration.

Observations indicated varying degrees of success with IF training in the FYE program. Students demonstrated marked improvement in facility with Internet search engines and with increased ability to locate both digital and print resources relating to their areas of inquiry. The area showing the most room for improvement was assessment of digital resources. While this topic received the bulk of attention during the actual workshops, its subtleties were perhaps the most difficult to grasp in a single session. Many students still demonstrated difficulty determining the original source of digital materials and the reliability of these resources. Also, incidents of web-bourn plagiarism seemed to occur with the same frequency as before the workshop.

The format and design of the workshops was generally effective (see attached). The IF website was perceived as well designed and served as a perpetually available resource. Further several students demonstrated dramatically improved skills after the IF workshops. Among those challenges that continue to face the IF-FYE interactions are:

- 1) Over-reliance on a one-shot approach.
- 2) Limited participation by some professors in the FYE program.
- 3) Difficulty incorporating IF skills into standard course materials (syllabus) and course evaluation.

To improve on the first issue above, it is recommended that future semesters feature a series of short (perhaps half-class) workshops and follow-up sessions or class assignments. Such an approach would ensure that students are continuously honing IF skills and adding them to their standard repertoire of scholarly attributes, rather than letting them atrophy after a single in-class endeavor. It is very likely that the number of FYE professors who in fact employ the IF seminar in their class curriculum will increase as they observe the potential benefits, and as more and more of their colleagues use the workshop format. Eventually it should become standard fare, but this will require continuing efforts by the IF team and FYE leadership (especially to convert the occasional technophobe).

As it stands, each class features a different range of required skills. Some professors demand more oral and group work while others require extensive independent research. This wide variation allows for quite a bit of freedom in syllabi, but it is possible that continuing efforts and interaction between the IF and FYE teams will assure that IF skills and the fruits of the IF workshop become standard elements of the FYE curriculum and demonstration of said abilities becomes an understood aspect of each section's evaluation measures.

We believe that our second deliverable of the grant greatly enhances the usefulness of the Centenary IF website to faculty and students. Research Exploration and Composition Heuristic (REACH) is a flash-based heuristic program that is available to students and faculty of ACS institutions via the World Wide Web. The program is designed to help students explore topics for argumentative research papers as well as effectively summarize, evaluate, and take notes on individual research sources. REACH helps students view research as a process of informed trial and error in which researchers initially explore rather broad questions, and then gradually narrow the scope of these questions as they become more familiar with the assumptions and arguments of people with vested interests in the topic and the issues surrounding it. The prompts in REACH guide students through a critical evaluation process that helps them determine which queries and bits of information are potentially useful and which are dead-ends.

REACH is an important information fluency resource because it helps students to 1) understand the role information plays in an argumentative research paper, 2) assess the relevance of individual sources to their topic, and 3) evaluate the authoritativeness and credibility of such sources. The program provides invaluable aid to those professors charged with helping students learn research skills. With classes of between fifteen and twenty students, many professors find it logistically difficult to monitor students' progress through the three or four weeks devoted to a research project. Although a professor might lecture students on how to choose debatable topics, form issue questions, investigate the arguments of interested

parties, and interrogate the sources they read, students often forget or disregard these important suggestions once they begin the project. These students fall back on the "book report" model of research papers taught in many high schools and as a result often end up producing a disjointed compendium of quotations and facts rather than a coherent argumentative paper. Many professors will catch such problems in the initial draft of the paper but often not enough time remains at that point for students to do an adequate job on the project. REACH helps prevent such problems from occurring. The heuristic modules in REACH continually emphasize research strategies thereby reinforcing class discussions. Moreover, the printouts REACH provides at the end of each section allow instructors to quickly check each student's progress.

At this writing, we are experiencing technical problems with this flash based program and our server, preventing a direct link from outside of Centenary's campus. However, we expect this problem to be resolved and a link to be posted on the ACS IF site within the next several weeks.

A new course, Communications 180: Introduction to Digital Communications was developed and taught for the first time during the fall 2002 semester (www.personal.centenary.edu/~enunn/f02/180.html) as a part of the ACS grant. In terms of the college's computer resources and information fluency, this course moved students to the "power user" level. The stated goals of the course were as follows:

- "Each student should develop a facility with the representative tools and technologies used in this course. These include programs such as Dreamweaver, languages like HTML, and protocols such as FTP and SSH.
- Equally important is that each student develops a strong conceptual understanding of the technical, philosophical, ethical and even legal challenges posed by new media and emerging technologies.
- Finally the course aims to situate these issues within a larger technological and historical context. Students should leave the class with an understanding of the relationship between what might be termed as "electronic literacy", "information fluency", or "cyber literacy" and the technologies of speech and writing that precede and inform it."

As a final component of the grant, a new course in knowledge management (KM) was developed for planned delivery in 2004. The School of Business identified the lack of coursework in the areas of information technology and knowledge management as critical gaps in its students' education. KM is an emerging discipline focused on how to effectively create and exploit the organization's knowledge-based assets. Knowledge-based assets include everything from new drugs designed from knowledge of the human genome, to better processes for responding to customers based on customer complaints. The course will draw on a mixture of case studies, readings and guest speakers to examine KM from an individual knowledge worker's perspective, as well as from the perspective of those who are responsible for an organization's overall knowledge effectiveness. In addition, the class will practice knowledge management techniques that they will have studied. They will utilize tools and techniques for **capturing knowledge** as it is created (e.g., benchmarking, lab notebooks, mind mapping, weblogs); **reflection** (e.g., after action review, learning histories, left hand column inference); **organizing** (e.g., The Brain, LATCH, FAQ); **disseminating knowledge** (e.g., Peer assist; Storytelling). Our grant from the ACS made it possible for the IF team to explore and purchase many of these KM software tools that will provide our students with applied experience and added information fluency skills.

In conclusion, we believe that all of the stated goals for the grant were successfully accomplished. Further, we look forward to continuing to build on these successes next year.

Information Fluency Proposal for FYE 102

What?

A hands-on, interactive workshop which brings Centenary College's information fluency initiative into a relevant and applicable realm for all first year students.

Why?

The IF project is designed to help students as they embark on research for scholarly writing. Specific aims of the project include helping students:

- 1) Begin research by forming a question
- 2) Search for secondary resources in the form of paper and digital materials
- 3) Assess digital resources as to their content, reliability, possible bias, and origin
- 4) Expand their palette of potential resources by gaining familiarity with digital resources for information sharing (email, blogs, personal sites, etc.)
- 5) Examine issues of intellectual property in the digital age, especially plagiarism, its definitions, how to recognize it, and how it can be avoided

Why FYE?

- 1) As our online course description says: "Our students learn to articulate their own positions within a broader public discussion, and this means first conducting and carefully documenting research and then developing and defending opinions within these contexts, in both written and oral form." IF is an essential skill for any person wishing to engage in such scholarly discussions.
- 2) FYE is the course wherein we shape our students' research skills in preparation for their entire academic careers. The emphasis on the documented essay in FYE 102 makes information fluency workshops even more essential.
- 3) FYE is the best forum for reaching students early in their experience and teaching good research habits before students learn ineffective or just plain bad ones.
- 4) Based on our past observations, FYE is a course with a high propensity for problems with plagiarism. The IF program has discussions and tutorials specifically designed to familiarize students with definitions and avoidance of plagiarism. If we address this issue through the IF program in FYE, we just might head off several of these problems before they start.

Possible Format:

Each section of FYE 102 would dedicate one class session to a hands-on IF workshop in a computer lab. By meeting in the lab, students will have opportunities to not only discuss IF but to also gain personal experience with the equipment and materials available from our own IF initiative.

An example of an IF lab session may include the following activities:

- 1) A brief (7 question) online survey to assess students' fluency before the workshop. (This survey is presently under construction and will be in place very soon.) Results from this survey will help us (the instructors) in future incarnations of FYE 102.

2) An introduction to Centenary's IF website: The site provides general overviews such as "what is IF?" as well as introductions to specific topics such as "IF and Critical Thinking." Specific activities should include learning to find this site on the web, navigating through the introductory pages, and using table of contents to link to areas of need and interest. Students should also be made aware of the fact that they can get downloadable IF documents in printable formats (.pdf's).

3) Tutorials from Centenary's IF site: Instructors may select tutorials which they think will most benefit their class. The tutorials page includes subjects such as "beginning research" and "exploring digital materials." The digital materials tutorial is quite comprehensive, and walking a class through it may be a primary focus of the session. The tutorial on "Presenting Your Work" includes several examples of how students might proceed through a specific project.

4) Applying the information from the tutorials in a lab exercise: Here the student has the chance to apply the materials learned from the IF website tutorials. For example, the instructor might select URL's of sites for the students to assess according to the format set forth in the digital materials assessment tutorial. These URL's might include sites whose materials bear on a topic of discussion for FYE 102 (last semester's examination of white supremacists' websites might be such an example). *In my experience with FYE 102 students last semester, I was surprised at how many used web sites from fringe political groups as reliable resources, because they failed to assess the sites using the materials from our IF project. I would be inclined to use URL's from these sites for student inquiries in the lab.*

Another exercise might be to have a search engine scavenger hunt, identifying a few websites by description and challenging the students to find them using search engines. Another "fun" search engine exercise would be having the students try for "Google whacks." (Google whacking is an online endeavor wherein people try to find pairs of words which bring up only one site on the Google search engine. While it may, by description, seem ridiculous, it is a good indicator of just how powerful this search engine can be. (See <http://www.googlewhack.com/>))

Results:

By having our students engage in personal contact with Centenary's online IF initiative, they will acquire essential fluency or at least know where to go to refresh their skills at any given time. The skills gained in this exercise should be the beginning of good research habits by our students and may very well make our jobs easier in the process.

Information Fluency Workshop for FYE 102

Why?

The IF seminar is designed to help students as they embark on research for scholarly writing. Specific aims of the project include helping students:

- 6) Begin research by forming a question
- 7) Search for secondary resources in the form of paper and digital materials
- 8) Assess digital resources as to their content, reliability, possible bias, and origin
- 9) Expand their palette of potential resources by gaining familiarity with digital resources for information sharing (email, blogs, personal sites, etc.)
- 10) Examine issues of intellectual property in the digital age, especially plagiarism, its definitions, how to recognize it, and how it can be avoided

Librarians have traditionally done the initial assessment before an acquisition is made. On the web, you must do this for every resource.

Supersurf works through the librarian.

Opening multiple windows.

How do you know where you are going? (look at address in lower left hand)

Use the methods described in the tutorial to assess the following sites and determine their sources:

http://www.theonion.com/onion3904/north_dakota.html

http://www.hejleh.com/edna_yaghi/slaughter.html

<http://hcs.harvard.edu/~igp/glass.html>

How to capture and use an image.

Always document where (URL) and WHEN you access a site.

Using IF to avoid plagiarism.

Is it OK to use sites with extremely polar viewpoints?

Yes!

But, be aware that they are not the final authority, and they tend to avoid the full range of perspectives in favor of ideologically specific angles.

Explore a wide range of angles on any topic.