

# **ACS Information Fluency Project Funded by The Andrew W. Mellon Foundation**

## **Second Year Report**

This report provides a narrative of the progress that has been made in the last 12 months towards achieving the goals of the Information Fluency Project that has been generously supported by The Andrew W. Mellon Foundation. The grant has enabled the Associated Colleges of the South consortium (ACS) to address the issues related to information fluency across the consortium and promote collaboration among faculty, librarians and information technology staff. The financial report can be found in Appendix A.

### **I. Task Forces**

Membership on the five key task forces was drawn from participants at an ACS symposium on information fluency held in November 1999 and from recommendations made by the chief academic officers. The groups are as follows: Guidelines; Modeling and Promotion of Information Fluency; Collaboration among library staff, IT staff, and faculty; Pedagogy and Curriculum Development; Assessment.

These groups met at a second symposium held in February 2001 to exchange information among the groups about their work during the previous year as well as to set the agenda for the current year. The groups learned about information fluency projects on individual ACS campuses and about other Mellon funded initiatives such as one at Bryn Mawr, Haverford and Mount Holyoke Colleges. Each of the groups made recommendations for the Coordinating Committee to consider for implementation during the year. The following is a summary of the activities for the year and recommendations from each group.

The Guidelines Task Force found that their recommendation to use the Association of College and Research Libraries' guidelines for information literacy as a basis for ACS guidelines was well received the previous year. They determined that the new challenge was developing recommendations on how to implement the guidelines, which is part of the charge of the Pedagogy and Curriculum Development task force.

Recommendations made to the Coordinating Committee included creating a kit with examples and models for implementing guidelines, funding fellows and workshops to develop the models, facilitation of collaboration among ACS schools and building a web site that would pull together ACS projects, papers and statements on Information Fluency.

The Coordinating Committee used these recommendations as part to draft a call for proposals asking for models and workshops that could be used as examples. The ACS office started gathering information for a web site, which will include best practices from funded projects as well as information gleaned from a survey of ACS members.

The Modeling and Promotion of Information Fluency Task Force started their work sessions at the second symposium by changing the name of the group from Training and Teaching Research Skills. The group felt that the original name limited what others would expect from the group and that the issues they were addressing were more about effective adoption of information fluency skills than about training issues.

The task force went on to discuss effective ways for increasing campus awareness of information fluency as well as developing effective resources for those interested in incorporating information fluency topics into their work. The group decided to work on determining what would be the best elements to have in a database of best practices and to gather articles that covered various aspects of information fluency issues.

The group recommended that the Coordinating Committee consider organizing regional workshops and implementing a way to share materials and models using a web based database as an example of sharing information about best practices.

The Coordinating Committee incorporated these recommendations in their call for proposals and the selection criteria for funding the projects. The web based database will be created from the results of a survey of ACS members.

The Collaboration Task Force discussed the status of individual campus initiatives for collaboration and found that experiences varied greatly. They outlined key influences on collaboration including the type of campus culture – hierarchical or autonomous, the programmatic and infrastructural concerns and the interest level of individuals.

The group recommended to the Coordinating Committee a consortially funded program for developing a kit or roadmap at a few institutions, which could then be adapted for use at the rest of the institutions. After making this recommendation to the committee, the group started work on a proposal for mini-grants that would enable ACS faculty and staff to travel to other ACS institutions to learn more about information fluency projects and to foster inter-institutional collaboration. The group plans to present its proposal at the third symposium to be held in February 2002.

The Coordinating Committee used the group's recommendations to draft the call for proposals and as the selection criteria for funding the projects that resulted. They are awaiting the proposal for mini-grants.

The Pedagogy and Curriculum Development Task Force examined the guidelines and discussed ways that they could be implemented. This led to the creation of a draft document outlining expected student outcomes that were more specific than those contained in the general guidelines. Work on this document continued in the fall, with the task force requesting feedback from all the other task forces. The group felt this document could be used as a basis for the other task force work. The final version of the document will be presented at the third symposium scheduled for February 2002. The draft version can be found in Appendix B.

The task force also recommended that ACS create a web-based repository of best practices and send selected information fluency program participants to various ACS campuses to share their expertise.

The Coordinating Committee expects the results of a survey of ACS members will provide the information needed to set up the web-based repository. The idea of sending expert participants to selected campuses will be incorporated in the proposal being prepared by the Collaboration task force.

The Assessment Task Force worked on defining a survey instrument that could be used to capture information on a variety of levels for the project. The main focus was to obtain information about what was happening in the area of information fluency on each of the campuses. It had become evident that the campuses were taking very different approaches to address information fluency issues.

The survey was also seen as a way to capture information about best practices that could be shared across the consortium. The group spent the spring of 2001 refining the survey. In the fall the survey was posted on the ACS web site and the individual campus teams were given information about how to encourage participation on their campuses. The results of the survey are currently being analyzed, with presentation of the results scheduled for the symposium in February. A copy of the survey can be found in Appendix C.

Preliminary results of the survey are promising. There are examples of different courses and uses of technology that will provide useful information for the best practices that many of the project participants are seeking.

### **Coordinating Committee**

Upon receiving the recommendations from the task forces after the February 2001 symposium, the coordinating committee realized that there were three common themes. The first theme was creating a central repository for information about information fluency projects. The second theme was sharing expertise through the creation of models and disseminating information about projects already under way. The third theme was promoting discussion through larger gatherings.

In order to address these themes, the coordinating committee developed a call for proposals that would stimulate the creation of new models and possibly assist current projects to develop materials that could be shared across the consortium. The committee felt the call for proposals would address the first two themes by creating new models and gathering information about projects on the ACS web site. The third theme of promoting discussion would be addressed by holding a third symposium (scheduled for February 2002) that would provide a forum for project leaders to share their results and for the task forces to concentrate further on their discussions.

## **II. Call for Proposals to create new models and workshops**

The Coordinating Committee listed the following as the goals for the call for proposals:

- ◆ Foster collaboration among faculty, librarians, information technologists and students at all ACS institutions. Collaboration can be inter-institutional or intra-institutional.
- ◆ Provide ACS faculty, staff and students with the skills necessary to integrate technology into their activities in ways that reflect the guidelines formulated by the Guidelines task force (URL [http://www.colleges.org/~if/IF\\_Guidelines.doc](http://www.colleges.org/~if/IF_Guidelines.doc)).
- ◆ Maximize resources by establishing mechanisms for sharing these across the consortium, thus providing access to resources that ACS members might not otherwise have.

The full call for proposals can be found in Appendix D.

The committee received twenty proposals from fourteen ACS institutions. The committee reviewed the proposals looking for unique projects that could easily be adapted by other ACS campuses. The result was that twelve of the proposals were recommended for funding to the ACS academic officers who endorsed the recommendations. A list of the funded projects with abstracts can be found in Appendix E.

Work began in mid summer for most of the projects, with those hosting workshops completing their projects in the fall. Some projects were semester long with planning for courses taking place in the fall and the implementation of the projects happening in the winter or spring terms. Each of the project leaders is expected to make a full report on project activities online as well as in a presentation at a symposium planned for February 2002.

Examples of these projects include the Centenary College and Rollins College projects that focus on the first year experience. The Centenary project focused on creating digital resources for the students and faculty including digital tutorials, classroom exercises and workshop materials to be used during their first year experience course required of all incoming students.

The Rollins project developed a pilot course for first year students that focussed on information fluency skills exclusively. Three sections of the course would be team taught through the school year.

The strong interest in carrying out the projects encouraged the Coordinating Committee to issue a second call for proposals in the fall. The second call generated 15 proposals. The committee will make recommendations to the ACS academic deans on funding in January 2002. This will allow the new project leaders to make plans to attend the February symposium to share information with previous project leaders. A list of the proposals can be found in Appendix F.

### **III. Symposium #2, February 2001 “Toward Information Fluency in the Liberal Arts Part I”**

Planning for a second symposium started in the first year of the project as a follow up to the successful symposium held in November 1999. Task force members indicated a need for gathering together in order to share information on the issues each group was addressing. The symposium was also seen as a way to share information about projects happening at other institutions outside of ACS.

To address the needs of the task force participants and to foster a wider understanding of the project on the individual campuses, the 2001 symposium was timed to occur during a meeting of the ACS Council of Academic Deans and just after a meeting of the ACS chief information technology officers. These key ACS officers were invited to the opening sessions, a panel discussion of other projects and a keynote speech. The project participants found it very helpful to bring together their deans and CIOs to discuss the key issues of information fluency in a setting that would not have been available on their individual campuses.

The symposium was set up to allow the task forces time to address the issues that had come up in their e-mail and conference call discussions prior to the meeting. Time was also devoted to important projects that were happening within the consortium and outside. Participants found it very useful to have Clara Yu, C.V. Starr Professor of Linguistics and Language and Director of Project 2001 at Middlebury College, and Susan Perry, College Librarian and Director of Library, Information and Technology Services at Mount Holyoke College, as keynote speakers who provided insights about information literacy in general and how it fit into what the group was trying to accomplish.

Another key component of the symposium was the panel presentation presented by participants in the Bryn Mawr and Mount Holyoke project funded by the Andrew W. Mellon Foundation. Several participants mentioned the panel as an excellent example of how to incorporate information fluency into campus activities. The panel presentation was also cited as an influence in some of the proposals that were submitted in response to the call for proposals. A copy of the symposium agenda can be found in Appendix G.

### **IV. Symposium #3, February 2002**

As mentioned in the section on task forces, at the second symposium each group developed recommendations for the coordinating committee, with three themes evolving from the discussions. The coordinating committee found the interest in holding another symposium to be very high and subsequently started planning to hold a third symposium in 2002. This third symposium was seen as a way to continue the work of the task forces as well as a way to disseminate information about projects that could serve as models of incorporating information fluency into the classroom.

The committee has invited the Five Colleges of Ohio to send panelists to discuss their projects, thereby providing ACS participants with information about other resources. The invited panelists have completed projects in the area of the first year experience and discipline specific projects. Three ACS projects that address the same areas will also be part of the panel.

## **V. Challenges**

Over the last year, many of the project participants found that they had difficulty in discussing information fluency issues with others on their campuses who had not yet started to look at the topic. While they found the work of the guidelines task force to be useful, there was still the challenge of defining information fluency in terms that could be understood more concretely. The Coordinating Committee attempted to address this by creating a working definition, a copy of which can be found in Appendix H.

While this working definition served as a tool to stimulate discussion, many participants felt that it was still too vague to adequately convey how information fluency differs from information technology skills mastery and how it needs to be incorporated into the curriculum. Consequently, the Coordinating Committee is attempting to refine their working definition and expects to present a new definition at the third symposium, with considerable time made available for discussion. Because of the complexity of the definition, the committee is currently working with a visual presentation in the form of a chart. A copy of the chart being used by the committee can be found in Appendix I.

Another challenge for the group was disseminating information about projects and issues. While the task forces had conference calls and access to WebBoard software to facilitate their work, the participants still see face-to-face meetings as the most effective way to achieve progress. They suggest symposia as a very effective way to bring all the participants together in the future. At the same time there is interest in sharing information in a more informal way, and the proposed travel grants may be the appropriate response.

## **V. Conclusion**

Overall, the project is making significant progress. The discussions generated by the various task forces have identified key areas for project initiatives. The second symposium was central in generating the agenda for the task forces and for the project as

a whole. The projects that have been funded as a result of the call for proposals will provide many examples and models that can be used across the consortium. The survey will also provide needed information about individual projects that can help spur inter-institutional collaboration.

Finally, the dialogue with other Mellon funded projects such as the Bryn Mawr, Haverford and Mount Holyoke project has served as a inspiration to ACS members resulting in new initiatives on individual campuses that would not have happened without the resources this project provides.

We are extremely indebted to The Andrew W. Mellon Foundation for making the grant to the consortium. Thanks to the Foundation, the ACS is bringing librarians, faculty and information technology staff together to focus on an issue of extraordinary importance to ACS campuses and to American higher education.

## ACS Information Fluency Project Year Two Report

### Appendices

- A. Financial Reports
- B. Pedagogy and Curriculum Development Task Force Draft Document
- C. Survey Documents
- D. Call for Proposals
- E. Projects Selected for Funding for 2001
- F. List of Submitted Proposals for 2002
- G. Agenda for Second Symposium, February 2001
- H. Working Statement of Information Fluency
- I. New Model for Definition of Information Fluency

## **Appendix B**

### **ACS Information Fluency Project Pedagogy and Curriculum Development Task Force**

#### **Draft Document**

#### **The Information Fluent student engages in five activities:**

- Problem Exploration and Identification
- Information Collection and Creation
- Critical Assessment, Evaluation, Analysis/Synthesis, a.k.a. Critical Thinking
- Formulation and presentation of logical conclusions in an appropriate and effective way
- Generalization of lessons learned in the problem-solving process to other contexts

#### **and applies these principles:**

- Produce information not just consume it. Create data, not just analyze it.
- Collect and present reliable information in a way that does not mislead.
- Make a positive contribution to the community (values-based information fluency).
- Understand the context(s), e.g. socioeconomic and political, in which information operates.
- Appreciate information in all forms (print, images, sound) and in different cultures.
- Be aware of different media's characteristics including their limitations and potential for bias.
- Manipulate, in a sophisticated way, large amounts of data, reducing it to a manageable form.

## Appendix C

### ACS Information Fluency Survey 2001

Created by the Assessment and Evaluation Task Force, this survey collects data on instructional activities related to information fluency at ACS Institutions.

#### **ADD RECORD** Page

From here you can enter your survey information into the database. The link above can be copied into other pages, allowing you to initiate Add Record from as many places as you wish.

#### **SEARCH DATA** Page

From here you can specify a search of the database. The results of the search will be returned as a "hit list". From the hit list you can perform additional actions, depending on what you specified in the assistant. The link above can be copied into other pages, allowing you to initiate Search from as many places as you wish.

Click here to see Samples of the Completed Survey (PDF) or search the database under "Institutions" for "Southwestern".

#### Explanation

##### **Dear ACS colleagues:**

We seek your cooperation in filling out this brief but strategically important survey about instructional activities related to information fluency on your campus. It would be a great help if you could submit your response by November 30. ACS recognizes that an important challenge facing liberal arts education today is to anticipate how emerging technologies will change the traditional ways we have taught and learned. We are therefore fortunate that the Andrew W. Mellon Foundation has awarded ACS \$600,000 to support information fluency initiatives on our member campuses. Information about this grant and initiatives can be found at <http://www.colleges.org/~if/>. Once again, ACS hopes to confirm the power of collaboration on such complex and important issues.

##### **What is information fluency?**

Information fluency may be envisioned as the optimal outcome when critical thinking skills are combined with information literacy and relevant computing skills. That is, we hope that our students will be able to collect the information necessary to consider a problem or issue, employ critical thinking skills in the evaluation and analysis of the information and its sources, and formulate logical conclusions and present those conclusions in an appropriate and effective way. In the context of this survey,

'instructional activity' would be any interaction between student, faculty, and staff that promotes the use of information literacy, computer literacy, and critical thinking. We recognize that this broad definition could technically apply to almost all courses and activities that take place on a liberal arts campus. We ask that you use your judgment in selecting those activities that have a particular focus on information fluency or that reflect significant changes brought about by the new technologies. You can find links to samples of two completed surveys on the survey page itself.

**What will the survey results be used for?**

This data will be of significant assistance to the members of the Information Fluency teams. First, we hope to establish a benchmark by which we can measure our progress as we undertake new initiatives. Second, we hope to begin sharing those best practices that will benefit all of our member schools as we strive to help our students succeed in our current information rich environment. Third, ACS recognizes that the creative uses of technology are legitimate endeavors in pedagogy and faculty development, and should establish rewards/merit program for outstanding faculty projects through juried recognition. The information obtained through this survey will assist us in developing guidelines for standards which might be used as a baseline for assessment. If you have any questions, please contact a member of the Information Fluency Team on your campus [http://www.colleges.org/~if/if\\_teams.html](http://www.colleges.org/~if/if_teams.html) or any member of the ACS Information Fluency Assessment Task Force, the group that is initiating this survey [http://www.colleges.org/~if/if\\_groups.html#Assessment](http://www.colleges.org/~if/if_groups.html#Assessment). Thank you in advance for your cooperation. We will do our best to disseminate our results in a manner that will be most beneficial to you, and we welcome your input into that process.

**The ACS Information Fluency Assessment Task Force**

Survey can be found at [http://www.colleges.org/~if/if\\_surveys.html](http://www.colleges.org/~if/if_surveys.html)

## Appendix D

### Call for Proposals ACS Information Fluency Project 2001

**Deadline:  
April 16, 2001**

ACS is pleased to announce a call for proposals from ACS members for collaborative projects in the area of information fluency. We are interested in hearing from ACS faculty as well as computing, library and other staff members. Our goals for the project include:

- ◆ Foster collaboration among faculty, librarians, information technologists and students at all ACS institutions. Collaboration can be inter-institutional or intra-institutional.
- ◆ Provide ACS faculty, staff and students with the skills necessary to integrate technology into their activities in ways that reflect the guidelines formulated by the Guidelines task force (URL [http://www.colleges.org/~if/IF\\_Guidelines.doc](http://www.colleges.org/~if/IF_Guidelines.doc)).
- ◆ Maximize resources by establishing mechanisms for sharing these across the consortium, thus providing access to resources that ACS members might not otherwise have.

Examples of projects that would meet the goals include:

- Develop a course module that focuses on information fluency and is team taught.
- Create a web site that focuses on identifying the best electronic resources for introductory courses in a specific discipline.
- Develop a workshop focusing on fostering collaboration on campus among faculty, librarians, information technologists and students in the area of information fluency.

Applications should include the following components:

- 1) Title of the proposed project, workshop, course, program or event
- 2) Names of leaders and contact information
- 3) Brief abstract of the project
- 4) Rationale (why should ACS fund this project and how will it benefit the consortium?)
- 5) Preliminary description, including:
  - a) number of days an event or the project will last
  - b) agenda
  - c) strategies for recruiting participants
  - d) target audience
- 6) Plans for follow-up and evaluation
- 7) Plans for dissemination of results to the rest of ACS and beyond
- 8) Preferred time of year for event: weekend during the academic year? summer? -- be as specific as you can be (if using ACS Tech Center facilities, note that limited dates are available)
- 9) Preliminary budget (materials, travel, workshops, speakers, etc.)
- 10) Written approval of your academic dean -- this can be conveyed via an email message from your dean to Barbara Halbert or a signed statement sent via post along with other application materials.

Ideal budget projects should be between \$2,500 to \$5,000 although exemplary projects will be considered for funding over that amount.

Submission of proposals must be made electronically to:

Barbara Halbert  
Director of Library Services  
[Barbara@colleges.org](mailto:Barbara@colleges.org)

## Appendix E

### ACS Information Fluency Project Projects selected for Funding April 2001

#### **Integrating information fluency standards into the curriculum**

Ford, Worley, Pitts, Whorton  
Birmingham-Southern College

Abstract:

The purpose of this forum will be to reach a consensus on student learning outcomes at the basic abilities level. Faculty will begin by hearing about the concept of information fluency and reviewing the competencies outlined by the Association of College and Research Libraries (*Information Literacy Competency Standards for Higher Education*, January 2000). Examples of best practices in several disciplinary areas will be presented. It may be useful to have an ACS "circuit rider" for this portion of the forum. Library and academic computing staff will also discuss ways in which they can assist in integrating information fluency into different areas.

Following this, faculty will break out into divisions to brainstorm and develop a plan for concrete ways in which they can integrate information fluency into their curricula. This will be done in 3 sequential sessions:

- a) idea generation about desired student competencies
- b) discussion and refinement of strategies for achieving desired competencies
- c) departmental level decisions regarding the particular courses in which these strategies will be implemented

Library and IT staff will be in attendance at the breakout sessions to offer their ideas and support.

#### **Centenary College, First-Year Experience and Information Technology Studies: Information Fluency Project**

Alexander, Shelburne, Hendricks, Newtown, Becker  
Centenary College

Abstract:

The Centenary Information Fluency Project will create a set of resources for providing students the First Year Experience (FYE) with information fluency (IF) skills. These resources, including digital tutorials, classroom exercises, informational texts, and IF workshop materials, will be developed by a student intern in the Information Technology Studies (ITS) program, in consultation with FYE faculty, the college writing lab, and Centenary's library and computing staff. After initial tryouts with fall 2001 FYE classes of all resources, spring 2002 FYE classes will have access to the same throughout the term. After assessment, the ACS member colleges will then receive access to the digital resources, while Centenary remains open to IF collaboration.

#### **Improving Information Fluency: Creating a Model Web Page Design Project for Use in Undergraduate Courses**

Fee, Garriott, Klimke, Richey  
Centre College

Abstract:

This proposal requests funds to support the development and dissemination of a model web page design project for introductory undergraduate courses. The model will provide a blueprint for achieving specific information fluency objectives in an undergraduate course. The goals of the design project will be to

improve the information fluency of students by focusing on developing their critical thinking, information literacy, and computer skills. The implementation of this design project in a course will require collaboration between the instructor and the students in the course, college librarians, and academic information technologists. The proposal leaders will collaboratively develop this model during the summer of 2001, and it will be disseminated to the faculty and staff of Centre College and other colleges within the ACS consortium beginning in the summer of 2001.

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

Bernd, Molinek, Muchane, Statler

Davidson College

Abstract:

We will create web-based information fluency modules for use in Principles of Biology I, an introductory biology course required of Biology majors and pre-med students at Davidson College. Topics covered would include: search skills and strategies for discipline specific databases; use of the WWW for information gathering; critical evaluation of data and information; components of scholarly communication in the sciences; and ethical and legal issues of copyright, citations, and plagiarism.

Design and development the IF module would be a done in collaboration by a team consisting of the faculty member responsible for the class (K. Bernd), a science librarian (F Molinek), an instructional technologist assigned to the Biology department (M. Muchane), and two students. The students would represent both a naïve information user (a freshman who has not yet taken the course—chosen fall '01), and a more sophisticated information user (an upper level biology major who has taken the class, Victoria Statler '03). Bio111 is currently structured with a weekly lab which has surplus time allowing for incorporation of an IF component. Either the faculty member, or the science librarian would introduce topics. This would be followed by time in which the students could work on the online module. The module would be created using Dream Weaver and Blackboard software. Assessment would be provided on three tiers; one during module development, a second as the modules are included in the curriculum, and a third as it used by more class sections. After effectiveness in the Davidson College Biology department has been assessed the modules and underlying approach will be presented to other departments at Davidson College via a campus-wide workshop. The modules will be available to other ACS institutions via guest access to our Blackboard site. The project will be further disseminated to ACS and GLCA member institutions, as project leaders will apply to present an ACS technology workshop

### **Looking Backward, Bringing Forward: Web-Based Archival Analysis and Presentation in a First-Year Writing Classroom**

Campbell, Blodgett, Eshleman, Gerbatch

Davidson College

Abstract:

In this project, students from Shireen Campbell's English 101 course will investigate the causes and/or effects of a major historic event—such as its change to co-education, its desegregation, or the impact of the Civil War--at Davidson College. Their investigation will result in four or five class web pages, one per team, featuring

- A collaborative introduction that contextualizes the event at the college;
- Links to individual student analyses of specific causes or effects;
- Links to selected archival materials relevant to the team project.

### **Integrating Information Fluency into the Humanities**

Clark, Fairbairn, Haldaman, Menzer

Furman University

Abstract:

The four of us will work together to integrate information fluency into the freshman Humanities sequence at Furman. We have chosen this course because not only does it reach 100 students a year, it also is taught by 10-12 different faculty members across the humanities; we hope, therefore, to develop faculty interest in information fluency by presenting it in this forum.

The model for our plan comes from the group at Mount Holyoke that spoke at the ACS IF symposium this spring. We will focus our attention this summer on, first, sharing our expertise in our different fields and, second, developing a plan to incorporate information fluency into the course. Menzer, as an instructor in the course, and Clark, as a recent student participant, will familiarize the group with the course's purpose, strengths, and weaknesses; Fairbairn and Haldaman will suggest possibilities for how the library and IS can support revisions. One of the course's current weaknesses is that its lecture format encourages student passivity; we hope that incorporating the goal of information fluency into the course will give us insight into how we can make the students more active participants in their own education, perhaps as producers of web or other computer-oriented projects that will teach them how to evaluate, synthesize, and produce information.

By the end of the summer we will produce a proposal for the Humanities faculty to show them how information fluency can be incorporated into the course, including a syllabus for the fall term which will give specific assignments and course readings that will teach information fluency as part of the goals of the course. The Humanities faculty are in the midst of a revision of this sequence, so now is the ideal time to reshape the course in this way.

### **Information Fluency at Morehouse College: A Collaborative Effort**

Crockett

Morehouse College

Abstract:

The goal of the Information Fluency Collaboration Workshop is to optimize the collaboration of Morehouse faculty, information technologists, students and AUC librarians in creating a model that makes *information fluency* a significant part of the college experience for every Morehouse graduate. It is our belief that achieving information fluency depends on a commitment of the College's academic community to making information competency a factor throughout the curriculum. To accomplish the goals of the workshops we will rely on the *ACS' Toward Information Fluency in the Liberal Arts* model: (1) Assist faculty, library and IT staff with their own information fluency, (2) Support and highlight individual initiatives in information fluency, and (3) Encourage interdisciplinary information fluency programs. The workshop will take place over two days during the summer of 2001 on the Morehouse College campus. The workshop will include training, demonstrations, and collaborative team development.

### **Fostering Information Fluency in the Introductory Biology Laboratory**

Lindquister, Johnson, Brooks, Gratzner, Jaslow, Jaslow, Kesler

Rhodes College

Abstract:

This project is a collaborative effort to integrate and expand upon several exercises that are a current part of the introductory laboratory, Zoology Laboratory, at Rhodes. The Principal Investigator will develop these exercises in consultation with the other professors teaching the lab, a senior biology student who has taken the course, and the Electronic Resources Librarian. The Dean of Information Services will administer an entrance survey assessing information fluency background and skills, and an exit survey assessing the success of the program in advancing those skills. The Zoology Laboratory is an ideal course within which to address these issues since it serves approximately 20% of the incoming class along with many upper class students, and success in further course work in Biology depends heavily on the use of these skills. Exercises developed as a part of this project will be made available electronically to ACS member institutions and results from this project will be reported via the information fluency web-site and, if possible, at a subsequent ACS Information Fluency Symposium.

### **Information Fluency instruction for first-year students: a team approach**

Cohen, Lloyd, Lairson, Zhang, James, Friedland, Casey  
Rollins College

Abstract:

Rollins College is proposing a pilot instructional program in information fluency for first-year students. The project will foster collaboration among Rollins faculty, librarians, students, and information technologists. The results of the project will be shared across the consortium and to a broader audience through the ACS web page.

We propose to teach a one-credit information fluency course for first-year students. The project will pilot three sections of the course to be taught during the 2001-02 academic year. The course, which will combine online tutorials with in-class sessions, will be taught by teams of faculty, student course assistants, IT staff, and librarians. The content of the course will reflect the ACRL Information Literacy Competency Standards for Higher Education, which have been endorsed by the ACS guidelines task force. These standards address the categories of preparation, access, evaluation, assimilation, presentation, and ethical use of information. The pilot will employ a variety of methods for enrolling students and assessing results.

### **Student-Designed Instructional Materials for Latin**

Carl, Fonken, McEuen  
Southwestern University

Abstract:

We will develop a course module for a third-semester Latin class that focuses on information fluency and will result in a student-created online learning archive. Led by a three-person teaching team composed of a faculty member, a professional librarian, and an information technology professional, students will work in pairs to research cultural topics related to the Neronian period and keep a journal reflecting the process. They will participate in both in-class and electronic discussions to identify and discuss their topic, and to situate their work within the context of scholarly discourse. Finally, they will present their findings first in the form of a research paper and then as an interactive web site. Over time, as the course module continues to be taught, the corpus of quality student-created web resources will grow and become a valuable tool for Classicists across the consortium and indeed worldwide.

### **Rollout of Specialized Instructional Software in a Liberal Arts Institution**

Leary, Rettig, Schoknecht, McCulley, White  
University of Richmond

Abstract:

The University of Richmond's planning process for rollout of GIS (Geographic Information Software) to the Richmond community can create a model for all ACS institutions in introducing specialized instructional software to their local communities. It draws on local strengths and individualized expertise within ACS in a way that will encourage the growth of greater local knowledge and more individual experts able to provide consulting services throughout ACS. This model can be applied to many sorts of specialized software (e.g., GIS, SPSS).

### **Using Peer Mentors to Promote Information Fluency**

Cline, Whitaker, Overholtzer, Tombarge  
Washington and Lee University

Abstract:

The project will redesign Management/Economics 203 (Quantitative Analysis) to incorporate formal training in information fluency, with the added training sessions to be developed and team-taught by the professor, an expert in information technology, a reference librarian and paid student mentors. The student mentors, chosen from among those who have previously completed the course, will be trained and equipped to be effective partners with the course instruction team. The student mentors will provide

informal assistance, helping students in the computer lab as they complete course assignments, and will also help teach formal workshops.

The project will not only strengthen the target Quantitative Analysis course, but also provide a model for other courses within Washington and Lee and the ACS in the following ways: 1) it demonstrates exemplary training and use of student mentors to enhance instruction in information fluency; 2) it seamlessly integrates information fluency instruction in regular course offerings; 3) it develops training materials that can be shared among courses that incorporate information fluency.

## Appendix F

### ACS Information Fluency Project List of Submitted Proposals for 2002

#### **Birmingham-Southern College**

##### **Continuation of integrating fluency standards into the curriculum**

Bruess, Ford, Baxter

Abstract:

Faculty and students on the Birmingham-Southern College campus would meet one day to continue the conversation for information fluency across the education curriculum. A second day would showcase uses already in place among the general faculty and serve as models for others to create their own methods within their disciplines to foster better use of technology for information fluency within classes. The results of these efforts would be shared with all faculty and with the ACS membership.

#### **Centenary College**

##### **Centenary College Information Fluency Project: A Full-Campus Approach**

Alexander, Shelburne, Newtown, van Hoosier-Carey, Becker, Fleck, Provost, Martin

Abstract:

After one year of successfully implementing an IF grant, Centenary's project seeks to strengthen and expand its scope through a series of new projects. The IF Web site (<http://www.centenary.edu/~balexand/if/>) will be expanded considerably to include a steady news update, more interactive materials, and further downloadable texts. A partnership with the Frost School of Business will create Knowledge Management (KM) materials for business classes, while developing the college's first Management of Information Systems (MIS) class for the 2003-2004 academic year. New IF materials will be developed aligned with the college's new core education requirements, instilling literacies according to their articulation in that document's language. A new course, Introduction to Digital Communication (Communication 180) will embody IF principles. ACS involvement will increase. The previous year's IF offerings will be repeated.

#### **Centre College**

##### **Technology Dreams: Building Information Fluency at Centre College**

Marshall, McAllister

Abstract:

This project request funds for a symposium promoting the information fluency of the faculty and, ultimately, the students of Centre College. This working symposium will first showcase various applications of technology to instruction that have been developed by Centre College faculty and professional staff. Building upon this collection of inspirational ideas, the symposium participants will then engage in hands-on training sessions to develop the skills and understanding required to implement their own ideas.

#### **Furman University**

##### **Assessing the "Computer Generation" in Liberal Arts Colleges and Universities**

Allen, Jr., Dunigan

Abstract:

Helping our students achieve information fluency is both a challenging and dynamic goal. Chief among these challenges is that our goal itself is a moving target. The rapid pace of change in information technology has likewise affected the preparations and expectations of our undergraduate students. In order to design more effective and engaging educational programs to achieve our goals, we need a more precise and current understanding of our students' backgrounds and attitudes about using information technology.

Recently, we conducted a survey of Furman University undergraduates. Over 500 students responded to an anonymous questionnaire that asked them about their backgrounds, computing experience, and current practices. In the proposed project, we hope to extend this work to establish a baseline describing computing experiences and attitudes for the liberal arts students across ACS institutions. This will be accomplished by soliciting the assistance of colleagues within at least five additional ACS schools. Each would administer the survey in order to collect additional data and participate in the analysis of the results (for at least six schools, including Furman). The survey instrument would be made available both in printed and on-line forms. We would assist cooperating institutions to conduct local surveys during the spring, 2002. The group would publish a final report (results and analysis) that would be made available to all interested parties—again, both in printed form, and on the Web—during the summer, 2002. We believe that this information would be extremely useful to our colleagues throughout the ACS and would hopefully lead to cooperative efforts developing new and innovative programs in information fluency. Further, we would hope that such collaboration would enable us to secure additional funding to support educational programs in information fluency.

## **Hendrix College**

### **A Journey into Information Fluency: Integrating Information Fluency into the Hendrix College Journeys Course**

Fought, Fraser, Johnsen, Moore, Schantz

Abstract:

A one day IF workshop led by a notable expert will increase faculty awareness of the intellectual significance of IF and will consequently provide future impetus for faculty to integrate IF into the curriculum. Moreover, the tangible desired outcomes will hopefully strengthen the conviction that IF successes will benefit the entire Hendrix College community. As Hendrix moves its academic calendar from a trimester to a semester system, the entire general education curriculum is undergoing revision – including the development of the Journeys course. This time of significant curricular change seems a natural opportunity to introduce IF into the curriculum, and the Journeys course is the perfect vehicle to ensure all entering students develop IF skills (through the collaborative efforts of the Journeys faculty, IT, and the library) necessary for academic and life-long success. This project can, with the proper dissemination of results, serve as an excellent model to future IF endeavors at Hendrix and other ACS institutions.

## **Rhodes College**

### **Proposal #1**

#### ***ACS Social Science Data Warehouse***

Mason

Abstract:

This project will create an *ACS Social Science Data Warehouse*. The “warehouse” will be a web site that contains a variety of social science data in easily accessible and downloadable SPSS format. It will be made available to any individual (faculty, staff, student, etc.) affiliated with an ACS member institution. The primary users of this web site would be instructors of and students in research methods classes in the social sciences (political science, international studies, economics, psychology, sociology, and anthropology). Secondary users of this web site would be social science faculty engaged in quantitative research and students conducting research with quantitative components. Much of data in the web site will come from the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan, of which the ACS schools currently share a membership. Other data in the web site will come from a variety of sources on the Internet that offer free, downloadable data. The unique feature of the *ACS Social Science Data Warehouse* will be that all data on it will have been converted to the Statistical Package for the Social Sciences (SPSS) format (making it immediately accessible for analysis), which is not the case with most data at the ICPSR and other warehouses.

## Proposal #2

### **Integration of Information Fluency into a Two-Semester Introductory Biology Laboratory Series**

Lindquister, Johnson, Olsen, Brooks, Blundon, Hill, Jaslow, Jaslow, Kesler, Miller, Stinemetz, Becker, Burks

#### Abstract:

This project is a follow-up to a 2000 ACS Information Fluency proposal on Fostering Information Fluency in the Introductory Biology Laboratory. That project involved modifying exercises that had been in practice for several years and integrating library instruction and pre- and post-course assessment of the information fluency of some 120 students enrolled in one semester of introductory biology. The course will be taught in the Spring of 2002, so the work is still ongoing at the time of this writing. However, since last year's proposal, a unique opportunity has presented itself. The Department of Biology is restructuring its introductory curriculum and is preparing to develop entirely new syllabi for its two-semester introductory laboratory series. Herein, we propose a half/day workshop that would function to focus discussion and foster ideas on how to fully integrate the objectives of the information fluency initiative into the laboratory exercises and assignments. We will also continue the use of an entrance survey assessing information fluency background and skills, and an exit survey assessing the success of the program in advancing those skills that will begin this spring. The ongoing assessment will provide extended data with a similar population of students to better monitor programmatic success. The model we develop will serve to inform other departments at Rhodes and ACS member institutions. Workshop format and materials and final syllabi will be readily available and exportable.

## Proposal #3

### **Integrating GIS into the Liberal Arts Curriculum: A Cross-Campus Seminar**

Steve Ceccoli, Ekstrom, Kesler

#### Abstract:

**We propose to offer a seminar at Rhodes College to explore way to integrate GIS, Geographic Information Systems, into the liberal arts curriculum. The seminar will foster collaboration between faculty, students, librarians, and information technologists to increase the use of spatial analysis across the campus. We will share the results with the consortium and the larger community by use of the ACS web page.**

## **Rollins College**

### **Integrating Information Fluency into the Curriculum**

Cohen, Lloyd, Lairson, Mays, James, Friedland, Casey

#### Abstract:

Information fluency is vital to critical thinking and workforce readiness skills. Understanding how information is stored, accessed, processed, and evaluated is essential to the academic and career success of our students. The basic principles of information fluency are flexible and transferable. Our objective is to seed a number of courses throughout the curriculum with a strong element of information fluency and technology issues. Students who participate in such courses will acquire practical knowledge of information fluency which can be applicable to further study and transferred into the workplace.

Rollins College is proposing a two-week seminar to provide faculty with training on techniques to seamlessly integrate information fluency into their course syllabi. Faculty will be provided instruction on how to redesign traditional syllabi and research projects to require students to apply critical thinking skills and information technology. Participating faculty members will implement this syllabus in a course during the 2002-2003 academic year.

## **University of the South**

### **Proposal #1**

#### **Sewanee Theology and Religious Studies (STARS)**

Dunkly, Phillips, Sells, Wood

##### **Abstract:**

As part of an overall effort to foster information fluency, the University of the South will undertake the development of a program to identify, describe, and train students in the use of electronic and audiovisual resources in theology and religious studies. This program, to be called Sewanee Theology and Religious Studies (STARS), will replace the present library orientation for the School of Theology and will introduce field-specific orientation to resources in religious studies for the Department of Religion in the College of Arts and Sciences. Creation of a STARS website is to be the primary outcome, together with the development of staff expertise in using the website as a teaching tool. This website will provide on-demand coaching to students (and secondarily to other library patrons interested in the subject area), tailored to the specific demands of courses being offered currently

### **Proposal #2**

#### **Writing Across the Curriculum and Information Fluency**

Clarkson, Sells, Lowryt

##### **Abstract:**

Since January of 2001, the Academic Technology Center has provided computing services to students in a newly renovated facility located in the ground floor of duPont Library. At the beginning of the fall semester of 2001, Writing Center tutors (previously working from another location) began utilizing space in the Academic Technology Center. Writing Center tutors provide individual help to students with writing assignments. Many of the assignments are associated with courses officially designated as writing intensive.

An area of the Academic Technology Center adjacent to the Writing Center is a natural space to provide students with a Technology Resource Center. Technology tutors could provide students with assistance in building web pages or preparing PowerPoint presentations for course assignments. With the collaboration of the Reference department of duPont library, the Director of the Writing Center, and the Academic Technology Center, writing tutors and technology tutors could be trained to assist students with all aspects of information fluency, including writing, research, and technical skills.

In addition, the Writing Center, the Reference department, and the Academic Technology Center could jointly offer a workshop to faculty members interested in exploring how writing intensive courses can be offered which explore alternative avenues of electronic expression in addition to the traditional “paper”.

## **Washington and Lee University**

### **Proposal #1**

#### **Development of a Mobile GIS Lab for Undergraduate Education and Research**

Rush, Blackburn

##### **Abstract:**

We have developed a free-standing course (Politics 295) devoted to fostering information fluency via hands-on exposure to GIS technology. (Course URL: <http://miley2.wlu.edu/redist/>). Specifically, we use ArcView GIS software as well as a specialized redistricting package in a class in which we instruct students with regard to the law and politics of redistricting in the United States and abroad and the practical problems of actually redrawing legislative districts using data from the census bureau.

In addition to the use of ArcView GIS and Autobound redistricting software, we also instruct the students with regard to basic statistical and spreadsheet applications by requiring them to construct additional datasets (such as latitude and longitude of candidates’ homes, polling place addresses and so forth) and also undertake basic geographical analyses of perimeters and areas of the districts they draw.

Currently we are setting up an internet map server (IMS) (<http://ims1.wlu.edu>) to allow us not only to publicize the students' work and research, but also to provide access to ACS members (and anyone else) who wish access to the course as well as the datasets and districting schemes that the students have developed. This will not only permit colleagues at other institutions to use our augmented datasets, but also allow them to engage actively the districting projects that the students have created.

### **Proposal #2**

#### **Collaboration to Manage Spatial Information on ACS Campuses: prototyping an information infrastructure**

Blackmer

Abstract:

Collaboration between ACS institutions can be built by face-to-face meetings to work on common problems. This proposal seeks travel funds to connect five ACS campuses in a project to develop software to support fluency with spatial data. External funding for further development will be sought once prototypes have been built and tested.

### **Furman University and Millsaps College**

#### **Developing Follow-on Information Fluency Experiences for Students Completing a Computer Literacy Course**

Abernethy, Shive

Abstract:

In today's environment, it is impossible to divorce information from technology. Thus, we must deal with how technology influences work with information. With each passing year, students come to college with a greater knowledge of computing tools. Thus, their technology skills are improving. As mentioned earlier, many take computer literacy courses (under a variety of names and guises) at our institutions.

Our proposal focuses on how to extend these technology skills to create information fluent graduates. Such graduates will be in increasing demand as we move fully into the digital age. Faced with unprecedented needs for an information-fluent workforce, we believe the existing pipeline of liberal arts graduates is a substantial and highly talented resource that should be playing a much more prominent role in addressing this critical national need. More innovative and expanded educational strategies in information fluency will help facilitate this outcome.

### **University of Richmond and Washington and Lee University**

#### **Assessing Student Awareness of Core Library Resources**

Rettig, McCulley, Brown, Merrill, Stanley

Abstract:

The University of Richmond and Washington and Lee University will bring an underrepresented and essential constituency into the ACS information fluency project. That constituency is our undergraduate students. They will participate in the project by completing a brief survey which will give these two institutions, and by extension all ACS members, valuable information about student awareness of fundamental library resources. This information can be used for IF program planning and as a tool for engaging faculty interest in IF.

## Appendix H

### ACS Information Fluency Project

#### Working Statement of Information Fluency

An important challenge facing liberal arts education today is to anticipate how emerging technologies will change the traditional ways we teach and learn.

We believe one of the best ways to address the challenge is by bringing the faculty, librarians, and IT staff together to develop a common understanding of the task before us. One of our goals is to find ways to guide our students in becoming adept in using the varied types and sources of information available to them in productive and responsible ways in their learning; in other words, to become information fluent.

Using critical thinking skills and appropriate technologies, information fluency integrates the abilities to:

Collect the information necessary to consider a problem or issue  
Employ critical thinking skills in the evaluation and analysis of the information and its sources  
Formulate logical conclusions and present those conclusions in an appropriate and effective way.

*Information fluency* may be envisioned as the optimal outcome when critical thinking skills are combined with information literacy and relevant computing skills, as suggested in this diagram:

