

**Associated Colleges of the South Information Fluency Grant Proposal:
Rollout of Specialized Instructional Software in a Liberal Arts Institution**

Submitted on behalf of the University of Richmond by:

David E. Leary, Dean of Arts and Sciences dleary@richmond.edu
James Rettig, University Librarian..... jrettig@richmond.edu
Pat Schoknecht, Director, Teaching, Learning, & Technology..... pschokne@richmond.edu
Lucretia McCulley, Head of Outreach and Instruction Services..... lmcculle@richmond.edu
Fran White, Coordinator, Academic Technology Services..... fwhite@richmond.edu

1. Title of Program: Rollout of Specialized Instructional Software in a Liberal Arts Institution

2. Name of and Contacts for Leader: Fran White
Coordinator, Academic Technology Services
804-289-6866
fwhite@richmond.edu

3. Brief 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).

4. Rationale: All ACS institutions are faced with the challenge of making specialized software available to the faculty, students, and staff of their institution. Issues that must be addressed include licensing, training, installation, maintenance, and continued support for both high-end and general users. Conducting such a rollout in an organized, careful, and thoughtful manner will help optimize success and allow our institutions to plan for needed support, including fiscal and human resources.

Here at the University of Richmond, we need to perform a full campus rollout of Geographic Information Software (GIS) during the AY 2001/02. GIS use among ACS institutions is spotty and uneven. Washington and Lee has clearly developed the use of GIS as a teaching and research tool more than any other ACS institution. On campuses where GIS is in use to a lesser extent than at W&L, its users have tended to be one or several faculty working independently of one another, using it primarily for research.

GIS can be a powerful instrument for both teaching and research. The recently completed United States Census will generate an untold number of new data sets whose value can be fully realized when processed by GIS software in support of teaching and research. For example, the Congressional and state legislative reapportionment process can be examined by taking multiple data sets for existing and proposed districts and mapping the information in these data sets in multiple layers to see how districts would change in terms of economic level, age, race, etc.

Faculty in fields as diverse as marketing, environmental studies, political science, sociology, women’s studies, biology, geography, and urban policy and practice can use GIS to advantage. (Administrative uses for alumni affairs, admission, network services, and grounds and facilities management are also important.)

As powerful as GIS is, it is also expensive, both in dollars and in human investment. The University of Richmond holds a university site license for ArcView GIS Suite. The initial one-time cost was \$10,000 and the recurring annual cost is \$10,000. This tool can and should be used by more faculty and students than currently use it. However because the learning curve for GIS is steeper than for most other software, that has not come about. The University needs to develop an effective plan to introduce this to more of its potential users and to assure their success from initial use and beyond.

Therefore, the University of Richmond proposes to carry out a planning process, making optimum use of GIS expertise within ACS, to introduce GIS and provide training in GIS to faculty who can use this tool in their teaching and research. The plan will bring together librarians (providers of many data sets), academic technology professionals (who assist faculty in integrating technology into instruction), students (potential peer trainers in the use of GIS as a student lab and research tool), and faculty (the catalytic agent that can bring all of the others together and give GIS vitality as an instructional tool). This will provide a model for all of ACS for introducing specialized instructional software to a campus community.

5. Preliminary Description: The GIS rollout planning process envisioned by the University of Richmond will consist of three phases:

1. Initial exploration of and planning for GIS's potential as an instructional tool, assessment of local resources available for training and support, training needs and options for meeting those needs, identification of potential stakeholders in a vigorous GIS program
2. Documentation of all of the above, development of recommendations for action, and review of the documentation and recommendations
3. Assessment of the documentation and recommendations, adoption of those recommendations, and creation of an action plan for implementation

Phase I:

Number of days event will last: The first phase would culminate in a one-day meeting of stakeholders: Faculty, academic technology professionals, librarians, and students. They will be aided by an external consultant, Hugh Blackmer of W&L, who will help the group both expand its thinking and conduct reality tests on plans. This meeting will be held in May 2001 as soon as possible after final grades are submitted.

Agenda for the meeting:

- Overview and demonstration of GIS
- Assessment of the state of GIS at Richmond
- Brainstorming about its potential to enhance instruction and research
- Identify resources and steps needed to fulfill this potential
- Identify potential stakeholders not present for the meeting
- Assess training needs for staff who will support faculty and student use of GIS (the University of Richmond has already allocated some funding for training, but asks that this be supplemented through the ACS grant.)

Phase II:

Number of days event will last: Over a period of approximately one month, librarians and academic technology professionals would create a document capturing the issues that surfaced during the May meeting, identifying potential strategies, and making recommendations. We anticipate that these would address, at a minimum, issues such as training for faculty, training for students, allocation of personnel to support GIS, and

budget. This would then be circulated to all of the May meeting participants for comment. It would be revised and sent to all before Phase III.

Phase III:

Number of days event will last: The third phase will consist of another one-day meeting with the same individuals who participated in the May meeting (including external consultant High Blackmer) and any additional stakeholders who were identified as missing at the first meeting. This meeting will take place in August of 2001 prior to the start of the fall semester.

Agenda for the meeting:

- Explanation of revisions to the draft report
 - Discussion of the report
 - Prioritization of recommendations
 - Identification of courses that will incorporate GIS fall 2001 or spring 2002
 - Assignment of responsibilities for carrying out recommendations
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Strategies for recruiting participants: Librarians and Academic Technology personnel are already committed to participate. Faculty will be recruited through the already strong liaison ties both of these groups have with them; faculty will also be offered a \$100 stipend for each of the one-day meetings. Students will be recruited from appropriate positions in the libraries, computer labs, and Academic Technology Services. They will receive their usual hourly wage for the time they attend the meetings.

Target audience: Any and all University of Richmond faculty who can use GIS to enhance their teaching and research.

6. Plans for Follow-up and Evaluation: Immediately after the August 2001 meeting we will be able to make a preliminary assessment of the success of the planning process. During the academic year 2001-02 we will be able to make a deeper assessment by seeing which recommendations and which pieces of the action plan have been carried out. Indicators of success may include number of courses using GIS for the first time, number of faculty and students trained to use GIS, online tutorials developed—available measures of success will depend upon the goals and action steps adopted in August 2001.
7. Plans for Dissemination of Results to ACS and Beyond: At appropriate points (e.g., August 2001 for a preliminary report) the University of Richmond will send reports to all other ACS institutions through the IF Web Board (or other mechanism recommended by the IF Coordinating Committee). In addition, we will work with ACS and the Mellon Foundation to disseminate reports of this and other ACS IF initiatives to the academic world at large. If we think an article documenting our experience would be appropriate for an applied journal, we will prepare such an article and submit it for publication, acknowledging, of course, the contribution of ACS and the Mellon Foundation.
8. Preferred Time for Event: The two major meetings for planning and decision-making would take place at the University of Richmond on weekdays in, respectively, May 2001 and August 2001. The external consultant's availability will be a critical factor in scheduling.