

Academic Resources and Computing Committee

Proposal for Funding

Due Thursday, April 1, 2004 (4:30 p.m.)

Project Title: Multimedia upgrade for geography classrooms

Project Director: Daniel Bedford

Department(s): Geography

College(s): Social and Behavioral Sciences

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Extension: 8091

Other Members of the Project Team: Geography department faculty (Eric Ewert, Bryan Dorsey, Hal Elliott)

Instructions:

1. Please complete each section in the space provided. The justification section should not exceed two single-spaced typed pages. (An addendum may be attached describing details of specific hardware and/or software that are requested with this proposal.)
2. You are required to obtain the signature of an ARCC representative for your college, indicating that she/he is familiar with the proposal, and can speak to it during funding deliberations.
3. Your department chair's signature is also required, indicating that she/he supports the proposal, and that the proposal is in keeping with departmental goals related to information technology and its applications to the academic mission of the institution. Your Chair's signature also indicates her/his commitment to help support the project financially if so indicated on the budget page.
4. Your dean's signature is also required, indicating that she/he has read and supports the project. Your dean's signature also indicates her/his commitment to help support the project financially if so indicated on the budget page.
5. Your college's computer committee must rank the proposal, and the committee chair's signature is required.
6. For certain projects an IT expert's signature is required. You must contact the appropriate individual if you are implementing a wireless network, multimedia classroom, software/hardware purchase that will require use of a campus server or work with online course software like WebCT Vista or ChiTester.
7. Submit one copy of the proposal, together with all relevant signatures, by 4:30 p.m., Thursday, April 1, 2004. NOTE: the ARCC no longer requires seventeen copies.
8. You must both email a soft copy and mail a hard copy of the proposal to the chair, David Ferro, MC 2401.

ARCC Representative:

I have read the proposal and discussed it with the Project Director.

ARCC Representative

Comments:

Department Chair:

The Department has reviewed this project within the context of overall information technology planning within the Department. If the budget page indicates financial support from the Department, I agree to commit those funds to this project.

Department Chair

Comments:

College Dean:

I have reviewed this project. If the budget page indicates financial support from the College, I agree to commit those funds to this project.

College Dean

Comments:

College Computer Committee Chair:

This proposed project has been reviewed and discussed by our college's computer committee. It is the consensus of the committee that this proposed project is consistent with information technology goals within the college. Furthermore, after ranking all of the proposals submitted by our college, we rank this proposal in priority as

_____ out of a total of _____ proposals submitted this year.*

*Note: Each proposal must be given a separate ranking; no two proposals may receive the same rank.

College Computer Committee Chair

Comments:

IT Representative:

For certain projects an IT expert's signature is required. You must contact the appropriate individual if you are implementing a

WIRELESS NETWORK (contact Brook Chase at bhchase@weber.edu or x7192),

MULTIMEDIA CLASSROOM (contact Bob King at rking@weber.edu or x6865),

CERTAIN SOFTWARE/HARDWARE purchases that will require use of a campus server or work with online course software like WebCT Vista or ChiTester (contact Ted McGrath at tmcgrath@weber.edu or x7196).

I have read the proposal and discussed it with the Project Director.

IT Representative (printed and signed)

Comments (including status):

Justification

Your proposed project should be described as clearly and succinctly as possible in the spaces provided below. Be sure to review the "Criteria for Funding" document. *The entire justification section should not exceed two single-spaced pages.*

Abstract (project summary):

This project aims to improve multimedia projection capabilities in classrooms utilized extensively by the Geography Department: Lind 125, and Social Sciences 48. A ceiling-mounted projection system will be installed in each room, connected to a desktop computer provided by the Geography Department. This would enhance the **implementation of information technology in a classroom setting**, and thus falls into category 3 of the ARCC funding criteria.

Lind 125 is a large-capacity lecture hall, and the Geography Department uses it extensively to teach its high-enrollment introductory physical geography class, GEOGR 1010 Natural Environments of the Earth. Modern approaches to the teaching of physical geography make extensive use of information technology, including satellite images to demonstrate weather patterns or any large scale geographic phenomena (river patterns, deltas, glaciers, and so forth), and computer animations to show the Earth in motion. The ability to project such images from the World-Wide Web or from pre-existing imagery is extremely valuable to this class, and a large number of students would be exposed to such images as a result of the high enrollments (class sizes are typically 50-100 students per class; the Geography Department usually teaches 6 sections of the class per semester).

Social Sciences 48 is used extensively by the Geography Department for both upper-level physical geography classes, and introductory level human geography classes. Again, a strong case can be made for the need to use satellite images and the internet in teaching these classes. As with the introductory level physical geography classes, satellite images and animations are extremely useful in helping students visualize sometimes quite complex phenomena. It is enormously helpful to be able to show them a picture (worth a thousand words), such as a satellite image of a landslide, or the broken-up surface of a surging glacier, or the huge expanse of Antarctica's ice sheets. For human geography classes, images of different places can help bring those places alive to students. Use of the World-Wide Web can bring the headlines of dozens of different newspapers from all over the world right into the classroom, illustrating the everyday problems and concerns of people living thousands of miles away. Information technology can help to shrink the world, and this is of enormous value in the teaching of geography.

The installation of projection systems in two rooms on campus extensively used by the Geography Department would enhance the teaching of geography classes. Computers would be provided by the Geography Department for connection to the projection systems, and the computers themselves would be connected to the World-Wide Web via existing data ports. It should be noted that laptop-and-projector cart-based systems have been used by the Geography Department for two years, and they are extremely useful. However, demand is such that permanent installations in these two heavily-used rooms would “free up” the cart systems as portable projectors and computers for use in upper-division classes and elsewhere on campus. The projectors required are fairly expensive, high-resolution projectors, because image quality is a significant factor in this project.

Objectives and goals of this project:

This project aims to install ceiling-mounted computer projection systems in Lind 125 and Social Sciences 48. Computers provided by the Geography Department would be connected to these projectors, and to the campus network via existing data ports in each room.

The intended goal is to improve the quality of teaching for geography classes in each of these rooms; and, as a secondary goal, “free up” existing portable computer/projector systems for use in other rooms.

Identify specific courses and/or programs that will directly benefit from this project:

(You may also want to describe how specific courses may be enhanced by this project.)

Specific courses: Lind 125 is where all daytime sections of GEOGR 1010 Natural Environments of the Earth are taught. There are over 360 students enrolled in various sections of this class taught in Spring 2004, so a large number of students would benefit from exposure to this technology. Specific enhancements include the ability to show satellite images and animations of weather patterns, volcanic eruptions, floods, and other physical geographic phenomena.

Social Sciences 48 is a more general-purpose room, and sees classes covering the spectrum from physical to human geography. Currently being taught in this room (Spring semester 2004) are: GEOGR 3090 Arctic and Alpine Environments, GEOGR 1100 Places and Peoples of the World, and GEOGR 1520 US and Canada. Specific enhancements would include, again, the ability to display satellite images, but also, for the human geography classes, the ability to show newspaper headlines from around the world, or the ability to make in-class use of the extensive mapping capabilities of the US Census Bureau. GEOGR 1520 US and Canada, for example, can make use of on-line maps of poverty, rates of owner-occupancy, or numerous other variables to show the distribution of those variables across space—the very essence of geography.

It should be noted that a similar project was funded last year, to equip B1 146 with a projector. This has been enormously successful, especially for classes involving computer cartography (which, frankly, it is difficult to imagine being taught without at least some access to computer projection equipment). Last year’s ARCC grant has transformed B1 146 into a ‘smart’ classroom, an extremely useful transformation.

If applicable, describe how this project will help to increase faculty productivity or enhance competency in some area of information technology.

(Please note that ARCC does not support faculty desktop or laptop computers.)

Faculty productivity would be enhanced by making our classes more effective.

Describe how the success of this project will be evaluated.

(If reports or publications are anticipated from this project, please indicate such.)

Discussions with other faculty members will be initiated to determine the uses made by faculty of the new equipment, and the extent to which they feel the classes have been improved by information technology.

(A survey of students could also be circulated, asking how much they believed the new information technology improved the class.)

Timeline:

(If funded, when will this project be implemented?)

This project would be implemented in late summer and early fall 2004. Installation would begin in late summer and ideally be completed by the start of classes. The new ARCC requirements for consultation with IT and facilities management ahead of proposal submission should ensure that the project is completed in accordance with this timeline.

Budget

Note: Please be as specific as possible regarding requested hardware, software, or other resources (you may include an addendum to describe the hardware). If funds are being committed from other resources, please so indicate.

Hardware:	ARCC (Requested)	Department (Committed)	College (Committed)	Other (Committed)
Panasonic computer projectors, model PT-LC76U (2)	3142.00			
Panasonic projector mounting plates (2)	150.00			
Kensington cable locks (2)	60.00			
Chief ceiling mount flanges (2)	220.00			
Dell IBM-compatible PCs (2)		2000.00 approx.		
Hardware Subtotals:	3572.00	2000.00		
Software:	ARCC (Requested)	Department (Committed)	College (Committed)	Other (Committed)
Software Subtotals:				
Other:	ARCC (Requested)	Department (Committed)	College (Committed)	Other (Committed)
Installation costs			400 approx.	
Other Subtotals:			400 approx.	
Grand Totals:	3572.00	2000.00	400 approx.	

TOTAL FOR PROJECT: 5972.00 (Sum of all columns)

Additional Resources

Please describe what other resources will be required to implement this project:

(Additional resources may include needs such as Academic Computing technical support or hardware installation through Electronic Services.)

Projectors will need to be installed by facilities management. Although precise figures have been difficult to obtain, rough estimates of the costs of installation were determined from discussions with Bob King and Conway Morris (head of carpentry).