



e-Learning Center Northern Arizona University

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Fall 2006 e-Learning Center Request for Proposals Enhancing Student Engagement through Educational Technologies

Proposal Due Date:	October 9, 2006
Decision Date:	October 27, 2006

Summary

e-Learning Center faculty support grants for the academic year 2006-07 include four categories of grants. These categories are 1) projects that address large enrollment freshman and sophomore courses, especially those courses with high dropout and high failure rates; 2) projects that redesign degree or certificate program curricula to focus on student engagement and experiential learning activities; 3) projects that involve experimental studies of two sections or more of the same course, with a control group and at least one group utilizing an educational technology not used previously in the course; and 4) projects that strengthen the design of existing face-to-face courses enhanced by specific technology. All projects should be informed by pedagogies of engagement and cultivate critical thinking, writing, quantitative analysis, analytic reasoning, and problem solving. The goal is to engage students in activities that are effective in developing critical capabilities for navigating the world of the future.

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Funding Description

e-Learning Center funds¹ are available to support faculty projects to develop, implement, and evaluate resources in the undergraduate and graduate curriculum. Student engagement is fostered

¹ Initiative supported by Technology and Research Initiative Fund (TRIF -Prop. 301) through the e-Learning Center.

by pedagogical practices that encourage experiential learning, develop connections with the curriculum, and promote student inquiry. Examples of technological teaching resources that enhance student engagement include simulations, collaborative activities, interactive “game” and strategy activities, case study and problem-based learning activities, and synthesizing and presentation activities. These resources, in general, are not text, library, or web resources that are static and primarily for reference. Typical resources to be integrated in grant-winning projects utilize NAU-supported information technology tools and the course management system, i.e., Blackboard Vista. Other software and technology needs may be supported in special cases.

The overarching goals of e-Learning Center faculty support grant funds are to increase NAU's capacity for successful use of Web and other information technology course components to serve distance and local students, to improve how we teach, to enrich student learning, to assure all NAU graduates are technologically literate, and to prepare graduates with skills for the workplace and a lifetime of learning. Key to the success of the e-Learning initiative is the successful application of appropriate e-Learning technologies that address various needs for access, scheduling, and improvement of learning activities for students at all levels.

Categories and Funding Levels:

I. Enhancement of Learning and Success in Freshman and Sophomore Courses

These projects address the development and implementation of comprehensive plans for experiential components for a large course or coordination of a course with multiple sections. Funds can be used for faculty, staff, and student compensation, and the acquisition of *directly relevant* supplies, services, software, or technology necessary for the success of the project. Funding requests are anticipated in the range from \$15,000 to \$25,000. The highest funding levels are reserved for projects with high impact based on the number of students affected, or on the potential for the proposed plan to provide widely generalizeable models.

Successful projects will develop methodology for student engagement and increase retention in the following ways:

- a) use technology to create learning experiences that engage students in problem solving, inquiry, and/or application;
- b) use technology to improve student success in large enrollment or gateway (high rates of drop, withdrawal, failure) courses;
- c) promote development of technological skills;
- d) use technology to strengthen learning of other essential capacities such as critical thinking, critical reading, academic writing, and effective communication, etc.

Some examples for ideas that fit this category would be:

- Interactive tutorials or animations that engage and clarify core concepts for introductory Science, Math, Social Science, and Humanities.
- Problem Based learning or case studies that emphasize discovery, integration, inquiry, and synthesis.
- Simulations, Web based collaboration (such as Wikis), or use of RSS feeds for real-time group applications that bring new relevance and realism for student learning.

- Locating, compiling, and developing effective practices using existing resources from repositories such as MERLOT (www.merlot.org) to provide additional materials outside of classroom presentations.
- Use digital audio to record mini-lectures for on-demand study such as podcasts (for an example see <http://boilercast.itap.purdue.edu:1013/Boilercast/>)

II. Update and Redesign of Undergraduate Degree or Certificate Program Curricula (Graduate Courses and Programs are eligible though with lower priority)

Funding in this category is for projects which address the development and implementation of resources for degree or certificate programs. Of particular interest are projects which unify the curricula of multi-section high-enrollment freshman courses or Liberal Studies courses. The goal is to increase student persistence and success in core courses with historically low student retention. Funds can be used for faculty, staff, and student compensation, and the acquisition of *directly relevant* supplies, services, software, or technology necessary for the success of the project. Funding requests are anticipated in the range from \$10,000 to \$15,000.

Successful proposals will address one or more of the following:

- a) use technology to support pedagogies of engagement in medium to large enrollment courses;
- b) redesign or enhance sequences of courses or programs through the use of information technology to increase student success or development of technology skills;
- c) promote development and articulation of core departmental/program learning outcomes and strategies to enhance learning and assessment of core outcomes;
- d) support program curriculum evaluation and redesign based on plans for student learning and assessment;
- e) incorporate technology skill outcomes into degree program curricula
(see <http://www2.nau.edu/provost/pacac/subcommittees/tlc/TLReport.doc>,
for an example see
http://www2.nau.edu/provost/pacac/subcommittees/tlc/it_literacy_forestry_rep.doc)

Some examples for ideas that fit this category would be:

- E-Portfolio use for reflective and student development within a major program.
- Implementation of pedagogies that make use of emerging technologies such as Blogs or real-time data collection for research and case study applications.
- Piloting emerging technologies such as Tablets, Handhelds or remote sensing data collection modules.

III. Assessment of Technology-infused Methodology

These projects involve experimental studies comparing two or more sections of the same course, with one section designated as the control group and at least one section designated as the experimental or treatment group. Experimental sections are taught using a technological teaching tool or instructional model never before used in the course. Funds can be used for faculty, staff, and student compensation, and the acquisition of *directly relevant* supplies, services, software, or technology necessary for the success of the project. Funding requests are anticipated in the range from \$1,000 to \$3,000.

IV. Enhancement and Strengthening of Existing Face-to-Face Courses

Funding in this category is for projects which identify existing courses and specific activities, topics, or concepts in need of experiential activities to strengthen student learning. The goal is to increase student persistence and success, and raise the level of course quality. Funds can be used for faculty, staff, and student compensation and the acquisition of *directly relevant* supplies, services, software, or technology necessary for the success of the project. Funding requests are anticipated in the range from \$1,000 to \$3,000.

Funding Period

Funding for all categories is generally restricted to one year after notification of approval. Continued funding after the 12-month period will require a new proposal or written extension request and can only be funded after all reporting requirements have been met. In most cases, the expenses associated with the project will be paid directly from e-Learning Center funds consistent with the approved budget. In most cases, faculty compensation will be covered directly by the e-Learning Center.

Selection Criteria

The specific goals of the current funding cycle are to encourage innovation in the redesign of courses using e-Learning techniques that engage students in active learning. An appropriate application of instructional technology will respond to the goals of the course or program and to the needs of the learners by using those tools and techniques that are most effective in engaging students with the content.

Funding is not available for projects which seek to:

- translate an existing traditional course without significant evaluation and redesign of course delivery by addressing the advantages of new models;
- use the online component to replace student study time in a traditionally taught face-to-face course;
- purchase computer hardware or software primarily as an upgrade, except for special use or new and emerging technologies with clear rationale for their use.

Projects must be directed by a full-time faculty member or academic administrator in the role of Principal Investigator and demonstrate departmental/unit commitment to the sustainability of the proposed activities.

All departments of funded projects and participants are expected to commit to:

- identifying and producing clear deliverables for the project according to a specific timeline of activities;
- evaluating the effectiveness of these resources by collaborating with the e-Learning Center to develop and carryout an assessment plan;
- sustaining the resources after the initial project funding;
- increasing campus-wide understanding of these resources and relative advantages and disadvantages of the approach;
- disseminating project materials and outcomes via web, print, public presentations, or other forums, including the production of an interim written report by January 1, 2007, and a final project report by June 1, 2008;

- attend and/or present at the e-Learning Center Faculty Showcase (once per semester) and the e-Learning Institute (usually in the third week of May);
- working with the e-Learning Center throughout the project.

The selection criteria used are the following:

1. Centrality with e-Learning Goals: What are the goals and intended outcomes of the project and how is the proposed development effort consistent with the goals of this Request for Proposals and the e-Learning initiative in general?
2. Impact of Project: What is the projected impact of the project on increased student learning, retention of current students, or recruitment of new students?
3. Student Involvement: To what extent and in what ways will NAU students be involved in the project? How will these resources incorporate student backgrounds and needs? How will students be involved in the evaluation of the resources developed?
4. Innovative Use of Technology: How does the proposed work represent a new, creative, or innovative use of technology (hardware, software, or processes) in engaging students and increasing student learning, either using new technologies or implementing familiar technologies in new ways?
5. Commitment of Academic Units and all Additional Participants to Sustainability: How will the department, college, or other unit sustain the development and support of these resources? Are unit funds available to maintain and upgrade equipment or software to keep the new delivery model in place?
6. Feasibility of Timeline and Plan: To what extent is the timeline and scope of work feasible with respect to the requested resources. What is the likelihood that the project goals will be met?
7. Evidence of likelihood for Project Success: To what extent does the project collect relevant information to make formative judgments concerning its effectiveness? Is the project evaluation plan based on appropriate collection and analysis of evidence?
8. Clarity of Assessment Plan: Does the project include an assessment plan that is workable and likely to produce evidence of the project's success in meeting the stated goals.
9. Appropriate Budget Request: Is the budget request appropriate to the scope and needs of the project? Are all items clearly described and justified? Are departmental resources used appropriately to support the project?
10. Past Performance: What is the track record of the Principal Investigator in working on designing learning in electronic environments or other curricular innovations?

Proposal Format

1. Cover Sheet, provided at end of this RFP
2. Two to four pages of project description. The project description should directly address all of the selection criteria above. At a minimum, the project description should include:
 - project goals
 - need for project (rationale)
 - project impact (number of students/courses/etc. impacted)
 - description of project activities including project deliverables
 - timeline for project activities
 - plan for evaluating the effectiveness of the project
 - demonstrated support from the department/unit
 - collaborations with other departments or academic units such as the Office of Academic Assessment
 - plans for dissemination of project findings and innovations
3. Budget narrative plus table with specific budget items and how they were calculated. Funds requested for salary and services should clearly indicate what each individual in the project will be doing over what period of time. Detail of funds for supplies or equipment should also be included.

Other Available Funding

Distance Learning also provides up to \$5,000 stipends to faculty for developing or redesigning fully online Blackboard Vista versions of new or existing courses (e.g., converting a traditional course into Blackboard Vista).

E-Learning Student Engagement with Educational Technologies Proposal

Cover Sheet, Fall 2006 RFP Cycle

Project Title _____

Principal Investigator _____

Department/Unit _____

College/School _____

Site (if not Flagstaff) _____

Project Category (circle One): (1) Degree (2) Certificate (3) Course

Brief summary of project (including total funding requested):

By signing below, the following faculty and administrators indicate their commitment to meeting the goals of the proposed work and to sustaining the project after the period of funding has

Lead Faculty	_____ Signature	_____ Date
Co-Lead Faculty	_____ Signature	_____ Date
Co-Lead Faculty	_____ Signature	_____ Date
Department Chair	_____ Signature	_____ Date
	_____ Printed Name	
Dean	_____ Signature	_____ Date
	_____ Printed Name	