Dee Family Technology Grants Funding Criteria

The Dee Family Technology Awards provide support for faculty projects using technology in research or applying technology to pedagogy. Funds are distributed based on a competitive proposal process and proposals are reviewed by the Academic Resources and Computing Committee.

In order to qualify for funding, a successful proposal must fit into one of the following general categories:

- 1. Projects specifically related to faculty research or scholarly activities.
- 2. Discipline-specific software to enable a faculty member to enhance an existing course, or to develop a new course.
- 3. One-time technical support for the development of special software related to a specific course.
- 4. Costs associated with one-time faculty training in an area of information technology directly applicable to the academic mission of the institution.
- 5. Requests for specific pieces of hardware are acceptable. However the hardware should be essential for completion of a project in one of the four categories above.

Given the limited availability of funds, restrictions exist related to the funding of information technology by the Dee Family Technology Awards:

- 1. During this initial phase, project requests are limited to a maximum of \$6,000.
- 2. Faculty and staff office computers are not funded. Under certain circumstances, an individual may require a machine that exceeds the campus standard. In such a case, this may qualify for funding.
- 3. Equipment or technical support for student or departmental laboratories are not supported.
- 4. Only projects directly related to information technology are funded.

The form below must be emailed (without signatures) and mailed to the ARCC chair, see ARCC chair and faculty reps by April 1.

Dee Family Technology Awards Proposal for Funding

Due April 1

Project Title: Development of Microsoft Producer Presentations with an "Online Whiteboard" for CLS 1113 and CLS 2003

Department(s): Clinical Laboratory S	Sciences
College(s): Dumke College of Health	Professions
E-Mail: Tprice@weber.edu	Extension: 626-8542
Other Members of the Project Team:	

Instructions:

- 1. Please complete each section in the space provided. The justification section should not exceed two single-spaced typed pages.
- 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. The form below must be emailed (without signatures and in PDF format) and a hardcopy mailed to the ARCC chair, David Ferro, dferro@weber.edu and MC 2401 by April 1.

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: (only necessary if co-funded at college level) 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:

Justification

Abstract (project summary):

The development of an online learning environment best suited to teach online students is one of the most significant challenges faced by online instructors. One of the best tools used to overcome this obstacle is the use of Microsoft Producer to make presentations viewable by online students. With Microsoft Producer, CDs can be made and sent to online students so they can listen to the instructor's voice while they watch the PowerPoint presentations.

It is my intention to spend the coming summer and fall semesters developing these presentations. As I have worked through the initial phases of this project, I have realized the need for an educational tool almost totally absent in online courses; the whiteboard. Microsoft Producer has a video capture function that allows the developer to record movements made on the PC. Simple drawing software can be used to draw pictures, label diagrams and work through math and statistic problems. To do this with a standard mouse is ineffective, at best.

The Wacom Intuos3 is a computer tablet and pen that allow a person to digitally write and draw just like they would if they were using a pen and paper or whiteboard and markers. Using this, an online instructor could draw, sketch, diagram and work through math problems, just as on campus instructors do in a classroom situation. Clearly the incorporation of this technology would close the gap between online and on campus learning.

Objectives and goals of this project:

My objectives and goals for this project are:

- 1. To develop CDs to be sent to all of my online students registered for CLS 1113 or CLS 2003. These CDs will contain important figures, graphs, reading assignments etc. as well as Microsoft Producer files of each class lecture. CLS 1113 (on campus) is taught in 45 lectures lasting about 50 minutes each. Because of the differences with online instruction, I plan to divide these lectures into 40 presentations lasting 40-50 minutes each. To do this I will make it my goal to complete 2 presentations per week. The time and effort it requires to modify the presentations, script what I am going to say, record audio (outside of class), add video and put it all together is tremendous. Hence my grant request to the Dee Family Technology Grant Committee.
- 2. To enhance online instruction by creating a more classroom-like environment through the use of an "online whiteboard." This feature will add life and character to online courses that can seem lifeless and cold to the student.
- 3. To develop and incorporate a way to effectively and efficiently teach math in a digital format. Anyone who has tried to type complex math equations, whether into a PowerPoint presentation or for an exam or assignment knows how difficult typing math can be. This technology will be a significant aid in preparing exams and assignments and will play a crucial role in online math instruction.

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

This project has the potential to benefit every course offered by the CLS Department, and online education in general, but will have the most immediate impact on CLS 1113 and CLS 2003. Other instructors in our department have made use of Microsoft Producer and receive very positive feedback for it. By incorporating the use of the computer tablet and pen, I hope to demonstrate an effective way to explain, diagram and draw as well as present and solve math equations in an online situation. I anticipate other instructors in my department, and others, will want to use this technology in their courses as well.

CLS 1113 Introduction to Clinical Laboratory Practices.

In this course students are required to learn the appearance and important structures of dozens of different elements found in urine. Drawing and labeling of these elements would be extremely advantageous over a simple picture and verbal explanation. Students are also required to learn the complex workings of the immune system. It is difficult to explain the way cells communicate and the structure and functions of things like antibodies and the complement system without a whiteboard or some other way to draw and diagram. There is not a single on campus lecture that I do not use the whiteboard.

CLS 2003 Laboratory Math

Scott Wright has prepared Microsoft Producer presentations for this course, but the use of technology that would allow the explanation of a math problem while the problem is being worked out is sorely needed. I will be teaching this class, on campus, this fall and both on campus and online in future semesters so I plan to start creating presentations with the tablet and pen technology immediately. Primarily I will focus on creating smaller presentations about common math errors we encounter and how to prevent them. These mini-presentations will accompany the Producer files Scott Wright has already created. In addition to this will be math problem sets and explanations to be added to the presentations Scott Wright has already created.

Describe how the success of this project will be evaluated.

Improved online course evaluations as well as direct feedback from online students will be the best indicators of the success of this project. It is already clear that something like this is needed and I am confident the incorporation of this technology will result in immediate positive feedback. The success of this project will also be demonstrated in the ease and convenience of working with this new technology (tablet and pen) compared to the methods used in the past (standard mouse).

Timeline:

If funded the tablet and pen would be purchased immediately. The development of the Microsoft Producer files and CDs would start early in the summer and continue into the Fall Semester. As mentioned in the goals section, I would complete two presentations per week.

Budget

I am requesting funds to purchase a Wacom Intuos3 6X8 tablet and pen, high quality microphone and to compensate the time needed to develop Microsoft Producer files for each of the lectures in CLS 1113 as well as the presentations mentioned for CLS 2003. We have experimented with many different manufacturers and models of microphones and have found most to be inadequate for the job. The Telex M-560 is the best that we have found.

Wacom Intuos3 6X8 Tablet and Pen	\$329.95
Telex M-560 Microphone	\$135.00
Tax, shipping and handling	\$15.00
Stipend for Producer file creation and CD production:	\$2500.00
Total Funds Requested	\$2979.95

^{*\$329.95} is the lowest price available for a new tablet and pen and is offered directly through the Wacom website. The product comes with the tablet, the pen a wireless mouse as well as all the needed software and cables.