Initiative Report for Science 2009-10

Science Technology Maintenance and Support

Summary:

The initiative supports student learning in Science by maintaining existing instructional technology, replacing outdated student computers, acquiring software, and upgrading and renewing licenses. Enhancements assist faculty in adopting and implementing effective and stimulating learning activities. This initiative also provides for personnel to support instructional technology in Science.

Description

The initiative maintains existing technology in the Science Division by replacing computer components, printer supplies, and various infrastructure hardware and software. The initiative replaces classroom computers in nine science labs/classrooms where computers are now over 6 years old. Outdated printers are replaced in 7 lab/classrooms with Laser Duplex printers, which support sustainability goals. We request a range of instructional enhancements to provide state-of-the-art pedagogy in all our lab/classrooms.

Technology used in the Science Division requires tech fee funding for two .5 FTE Information Technology Support Specialists. The Specialists support student-used computers in classrooms and the SRC; and provide support directly to students engaged in computer-based learning activities and projects.

Questions and Answers

How is the initiative linked to the Unit Plans most recently submitted?

1. **How does it continue the achievement of those goals?**
2. **If this is a continuation of an initiative started last year, make sure that relationship is clear.**

How is this initiative linked to the efficiencies and productivities plans you had last year?

1. **How does it continue the achievement of these plans?**
2. **If this is a continuation of an efficiency or productivity plan started last year, make sure that relationship is clear.**

With the exception of enhancements, this initiative is linked to the other Unit Plans recently submitted by listing recurring needs, necessary to the function of instruction.

It continues the achievement of those goals by:

- Providing personnel to maintain student computers in science laboratories, and the Science Resource Center which offers computer testing and computer use for students. These services are needed to support science classes and to retain students.
- Complying with course syllabi and software licensing copyright laws.
- Ensuring that students have functional computers and to maintain the support of student computers and other forms of technology (too many to list here) used in science teaching by all science disciplines.
- Transforming the college organization by building systems to support student success and effective operations, which then promotes growth. It ultimately provides increased development opportunities for students both within and outside the College.

Describe the resources needed:

1. Maintenance of Student-Use Computers and Printers

- Software Licenses 6,213
- Student workstation hardware components 1,500
- Projector maintenance (lamps and components) 3,500
- Printer supplies (toner, fusers, drum kits, transfer kits, maintenance kits) 16,256
- Modules 1,744
- Server hardware components 6,345
- Warranty extensions 1,447
- Infrastructure 1,800

Total Maintenance $38,805
Tech Fee

2. Replacements

Student laboratory hardware replacements for systems more than 6-years old

- 103 - 9 (PC) systems@$1,000 each = 9,000
- 105 - 9 (PC) systems@$1,000 each = 9,000
- 107- 9 (PC) systems@$1,000 each = 9,000
- 115 - 9 (Mac) systems@$1,400 each = 12,600
- 147 - 9 (Mac) systems@$1,400 each = 12,600
- 148 - 9 (Mac) systems@$1,400 each = 12,600
- 152 - 12 (PC) systems@$1,000 each = 12,000
- 153 - 1 (PC) system@$1,000 each = 1,000
- 154 - 1 (PC) system@$1,000 each = 1,000
- LaserJet Duplex Printers (7@$1,500 each) - Rooms: 145, 144, 130, 111, 109, 107, 152 = 10,500

Total hardware replacements $89,300
Tech Fee

3. Support

Two 0.5 FTE Information Technology Technicians

- 0.5 FTE Information Technology Technician @ $21.63/hr; LA,S19, $22495 Salary plus $11,337 OPE [.504], Total: $33,832
- 0.5 FTE Information Technology Technician @ $16.18/hr; L8,S6, $16811 Salary plus $5,094 OPE [.303], Total: $21,905

Tech Fee; General Fund

4. Enhancements

- Starboard Systems (3@$1,375 each) 4,125
- Ceiling Mounted Projection System (room 130) 7,500
- Projection System Computer (130) 1,500
- New Software 1,800
- Shared Use Computers and Components 2 - (room 128) 3,750
- Audience Response Systems(3 classrooms: 26 Response Cards/classroom@$28each, 3 RF Receivers+case) 2,634

Total Enhancements $21,309
Tech Fee

All dollar amounts are approximate.

What specific measurable program outcomes do you expect to achieve with this initiative? The outcomes should be specific enough to be measurable. Also, outline the method that will be used to determine the results.

1. Approximately 8,000 students annually will benefit from maintaining instructional technology in Science. (enrollment data)
2. Students using the SRC will experience a high level of technical support and access to computers to complete course projects and study using specialized software. (Student survey data)
3. Students in Science lab/classrooms will experience a high level of engagement in learning activities supported by computer technology. (course evaluations, survey data)

Department Priority:

Unit Resources:

Staffing needs for technology are also included in our Priority #1 initiative. This initiative is given Priority #2 since it represents recurring funding needs for technology support for the Division. This initiative reflects the intrinsic costs of providing quality science education for our students. Technology support needs to move from non-recurring Tech Fund support to a line item in the College's budget.

Unit resources include existing technology and support staff which are essential to the teaching and learning environment of the Division. David Schiappa, our Network Administrator, will assist in the installation and maintenance of instructional technology for Science.

Funding Request: Carl Perkins

Funding Request: Curriculum Development

1. List the following information

- **Course Numbers (titles if not currently offered)**
- **Instructor Name(s) who will work on the curriculum development**
- **Whether each of the courses is in, or has been through, the curriculum approval process**

2. List each course number (or title) and the materials to be created for each class

- **Instructional goals, objectives, syllabi and outlines**
- **Lab instruction packets**
- **Practice, quiz, presentation &/or demonstration materials**
- **Other (specify)**

3. List each course number (or title) and give your timeline for beginning and completing each course curriculum development.

4. What are up to 3 departmental instructional goals that are met through the development of curriculum in each class?

5. List each course number (or title) and give the value of the development of curriculum in each course to other faculty members.

6. List each course number (or title) and say how many students will be served by the development of curriculum in each class.

7. List each course number (or title) and give the specific benefits to students that you expect from the development of curriculum in each class.

8. List each course number (or title) and give the specific benefits for diversity that you expect from the development of curriculum in each class.

9. List each course number (or title) and give the specific benefits to sustainability that you expect from the development of curriculum in each class.

10. List each course number (or title) and give the specific effects on distributed learning that you expect from the development of curriculum in each class.

Hours requested for Curriculum Development funding:

Please enter the amount of one of the following:

- **100 hours maximum for new development.**
- **70 hours maximum for course revision**
- **50 hours for 3-4 credit conversion**
- **other (use if multiple courses addressed in one initiative**

Do not enter any characters other than numbers and a decimal.

How many hours are you requesting? If there are multiple courses addressed in the initiative, please list each course number (or title) and give the number of hours requested for each course.

Funding Request: Technology Fee

1. Category of request

- **Maintain existing technology**
- **Increase student access to technology**
- **New technology**

Please type in the category of the request in the field below.

Maintain existing technology; increase access; new technology

2. Campus location

- **Main Campus**
- **Downtown Center**
- **Florence**
- **Cottage Grove**
- **CLC (list specific locations)**

Please type in the location of the request in the field below.

Main campus

3. Names of the person(s) with more information (if needed):

Sarah Ulerick, Interim Division Dean
David Schiappa, Science Network Administrator

4a. Budget ORGN

691002 - Science Administration - Comp

4b. Budget PROG

111000

5.How many students will benefit per year?

Approximately 8000.

6. Describe the benefit?

Students will benefit by having appropriate hardware, software, and support necessary for science instruction.

COMPUTER HARDWARE $

139954

COMPUTER SOFTWARE $

1800

STAFFING $

55737

INSTALLATION $

LICENSING $

7660

Can this initiative be partially funded?

Yes

COMPUTER HARDWARE $

120445

(CH) Explanation of effect of partial funding:

This funding level covers only maintenance and replacements. All enhancements, which are intended to increase the smart classroom capacity of lab rooms in Bldg 16, are removed.

COMPUTER SOFTWARE $

1800

(CS) Explanation of effect of partial funding:

This removes the new software category of expense; new software extends learning opportunities for students.

STAFFING $

55737

(S) Explanation of effect of partial funding:

Cannot be partially funded.

INSTALLATION $

(I) Explanation of effect of partial funding:

n/a Installation is done by existing staff.

LICENSING $

7660

(L) Explanation of effect of partial funding:

Cannot be partially funded.