Science 2011-12

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The initiative supports student learning in Science by maintaining existing instructional technology, replacing outdated student computers, acquiring software, and upgrading and renewing licenses.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 projection systems in 5 science labs/classrooms where projectors are now over 6 years old. Outdated printers are replaced in 2 lab/classrooms with Laser Duplex printers, which support sustainability goals.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.

The complexity and quantity of tech support needed for instructional technology in Science has increased, while our staffing to support technology has not increased substantially since FY04-05. At that time we had two timesheet employees ("1039") providing tech support in addition to David Schiappa, our 1.0 FTE Network Administrator. In FY06-07 staffing changed when Priscella Johnson joined the Division as a .5 FTE Information Technology Technician (C2 status). We continued one of the "1039" timesheet positions at the Instructional Support Specialist level.

Since FY06-07 total sections taught have increased by about 23%, registrations have increased by 36%, and FTE has increased by 31%. Enrollment in FY10 increased over 9.5% in Science, from approximately 1066 FTE in FY09 to 1167 FTE in FY10. Staffing has not increased to keep pace with this growth. Technology used in the Science Division requires tech fee funding for one 1.0 FTE Information Technology Technician, which will provide a high level of skill and consistency for technology support. This represents a change from past years. The Technician supports student-used computers in classrooms and the SRC; and provides 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.**

This initiative continues the achievement of the two themes in the FY2011-12 Science Division Unit Plan, which have been consistent over the past three years. This initiative also supports Lane's strategic direction for optimal student preparation, progression and completion (supports student learning in a wide range of courses) and for online learning and educational resources.

A) Optimizing sustainable access for students and options for quality learning

B) Optimizing the curricula and resources we already have.

Specific goals and activities are:

10. Maintain and improve technology for student learning. Provide adequate, stable staffing for supporting technology and provide professional development for technology use.

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 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 2,470
- Projector maintenance (lamps and components) 3,500
- Printer supplies (toner, fusers, drum kits, transfer kits, maintenance kits) 18,256
- Infrastructure 8,812
- Server hardware components 1,239
- Warranty extensions 1,635
- UPS batteries 470

Total Maintenance $42,595

Tech Fee

2. Replacements

Student laboratory hardware replacements for systems more than 5-years old

- 2 (PC) system@$1,150 each (projector carts) = 2,300
- Headphones (24) – SRC, Room 193 = 316
- 1 (PC) system@$1,400 each - Room 128 = 1,400

- Server storage – hard drives = 7,068
- LaserJet Duplex Printers (2@$1,500 each) - Rooms 140, 142 = 3,000
- Projection Systems – Rooms 142, 144, 145, 154, 188 = 25,480

  Installation for Projection Systems – Rooms 142, 144, 145, 154, 188 = 6,000

Total hardware replacements $ $45,564

Tech Fee

3. Support

One 1.0 FTE Information Technology Technician @ LA,ST19, $46,761 Salary plus $25,952 OPE [.555], Total: $72,713

Previous funding:

Two 0.5 FTE Information Technology Technicians

1. 0.5 FTE Information Technology Technician @ $22.48/hr; LA,S19, $23,381 Salary plus $12,976 OPE [.555], Total: $36,357
2. 0.5 FTE Information Technology Technician @ $16.13/hr; L8,S9, $16,759 Salary plus $5,229 OPE [.312], Total: $21,988

Net New Costs: $14,368

Recurring Costs:

Tech Fee; General Fund

4. Enhancements

- iPads - Rooms 105, 107, 109 = 2,187
- HP Color LaserJet P4025DN Printer - Room 115 = 1,300
- iClicker Remotes, and Receivers – Rooms 140, 142, 105, 107, 109 = 4,640
- Blu Ray DVD Players - Rooms 103, 105, 107, 109, 111, 115, 117, 140, 142 = 2,250
- Flatbed Scanner – large 12x17 format – Room 142 = 2,500

Installation – n/a

Computer Software - $3,200

- New Software

Total Enhancements $16,077
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 10, 400 students annually will benefit from maintaining instructional technology in Science. (Classbuilder, Registrations for 09-10, excluding College Now)

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:

1

Unit Resources:

This initiative is intentionally ranked #1 by SAC members of the Science Division representing the high need for technology support of instruction. All initiatives are valued by the Division.

The Science Division supports technology installation and maintenance through a 1.0 FTE Network Administrator, David Schiappa. We also commit $7500 annually in the Science Division materials and supplies budget (General Fund) for support of instructional technology. In recent years we have exceeded that budget. Dedicated lab-classrooms, a student computer lab, and the Science Resource Center provide space for computers, projection systems, clicker sets, and printers for student use.

Funding Request: Carl Perkins

Funding Request: Curriculum Development

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 student access to technology, 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, Division Dean and David Schiappa, Science Network Administrator

4a. Budget ORGN

691002

4b. Budget PROG

111000

5.How many students will benefit per year?

Enrollment in FY10 increased over 9.5% in Science, from approximately 1066 FTE in FY09 to 1167 FTE in FY10. Since FY06-07 (when we acquired the .5 FTE position for Priscella Johnson, Instructional Technology Technician) total sections taught have increased by about 23%, registrations have increased by 36%, and FTE has increased by 31%. All science students benefit from maintaining instructional technology in Science. (Classbuilder data, FTE, excluding College Now)

6. Describe the benefit?

1. Students will experience a high level of technical support and access to computers to complete course projects and study using specialized software.

2. Students in Science lab/classrooms will experience a high level of engagement in learning activities supported by computer technology.

3. Students will use computer technology in laboratory settings to investigate, analyze, and report science data in a wide range of applications.

COMPUTER HARDWARE $

87188

COMPUTER SOFTWARE $

9413

STAFFING $

72713

INSTALLATION $

6000

LICENSING $

1635

Can this initiative be partially funded?

Yes

COMPUTER HARDWARE $

74311

(CH) Explanation of effect of partial funding:

This funding level covers only maintenance and replacements. All enhancements are removed. Enhancements are intended to increase the smart classroom capacity of lab rooms (iPads and Blu Ray), add color printing for Biology students, provide audience response systems (iClickers), and provide Earth and Environmental Science students with a way to digitize maps.

COMPUTER SOFTWARE $

6213

(CS) Explanation of effect of partial funding:

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

STAFFING $

58171

(S) Explanation of effect of partial funding:

One 0.80 FTE Information Technology Technician @ LA,ST19, $37,409 Salary plus $20,762 OPE [.555], Total: $58,171

This removes 0.20 FTE from the Information Technology Technician support for students. The reduction would impact students in a negative way, while need for technical support increases due to essential use of technology for teaching and continuing enrollment growth. This reduced level of funding is just below the amount we would have requested for the previous funding model of a .5 FTE Information Technology Technician and a "1039" timesheet Instructional Support Specialist. In other words, this represents *status quo* for Tech Fund STAFFING funding for the Science Division.

INSTALLATION $

(I) Explanation of effect of partial funding:

LICENSING $

(L) Explanation of effect of partial funding: