

Southern Polytechnic State University
Georgia's Technology University
Division of Information Technology (DoIT)

Strategic Plan

Developed in collaboration with the SPSU University Information Technology Advisory
Committee (UITAC)

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Executive Summary:

The primary goal of the IT Strategic Plan must be to support the Strategic Plan for the University. The three major goals of the current University Strategic Plan are:

1. To become more comprehensive in scope;
2. To increase enrollment; and
3. To increase the sense of ownership in the success of the university among all members of the university community.

Each of these goals will have a significant effect on the Division of Information Technology (DoIT). To be prepared to support the first two goals DoIT will need to plan for a greater number of more diverse users in the future. The third goal underscores the need to plan not only for hardware and software with increased capacity and bandwidth but also for the human factor. The human factor requires, among other things, that people feel they are “in the loop” and that technology and DoIT are supporting them and their goals.

In addition to the stated University goals there are implicit goals that need to be explicitly considered. The Board of Regents Strategic Plan establishes an expectation of significant growth in enrollment and a continuous increase in the percentage of semester hours delivered via distance learning. These expectations will place significant demands on DoIT. Combined with the tag line of “Georgia’s Technology University,” DoIT will be challenged to meet the high expectations of a University that uses technology to teach technology and to allow the faculty to do this whether or not the students are on campus.

In support of the University’s Strategic Plan and its goals, the Division of Information Technology will focus on the following three strategic goals:

1. Provide leadership and support to the SPSU community in using technology to improve campus processes
2. Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines
3. Establish structures and systems to foster collaboration and communication with the SPSU community

Over the ensuing months these goals will be discussed and vetted through all campus constituencies, culminating in formal approval of the Division of Information Technology Strategic Plan by the faculty and staff of SPSU.

Foreword

As Dean of the School of Computing and Software Engineering and Professor of Information Technology and a newcomer to Southern Polytechnic State University, it is a pleasure to write a foreword to the IT Strategic Plan.

There are two requirements that an IT strategic plan must meet.

First, any IT strategic plan must align with the strategic plan of the overall organization. The plan presented here is situated explicitly within the context of the SPSU strategic plan and it is not hard to see how each of the goals and sub-goals in the IT strategic plan is relevant to the goals and sub-goals in the SPSU strategic plan. While the attainment of the SPSU strategic goals will obviously require the achievement of many more goals than just those listed in this plan, one can certainly make a case that none of the SPSU strategic goals can be accomplished without at least the partial realization of the various goals in the IT strategic plan.

Second, any IT strategic plan must provide guidance to an IT Services organization. This is of special importance as the SPSU Division of Information Technology, in common with any other SPSU unit, operates in a resource lean environment and simply does not have the resources to successfully complete every project that it may be requested, or indeed wish, to take on. It is therefore imperative that the strategic plan for the DoIT provides it with directions on how to use its resources in the most cost-effective manner to the optimum benefit of the SPSU community. While the plan is extremely broad in scope, it nevertheless would seem to provide the necessary guidance to the Division of Information Technology.

While there are details in the plan that one can quibble with, the plan seems to me to by and large meet the two essential requirements of any high-quality IT strategic plan. I want to congratulate the committee on putting this plan together and I look forward to working with the Division of Information Technology as we continue our attempts to apply the SPSU tag line “Georgia’s Technology University” not only to our various educational and research programs but also to our administrative and other operations.

Han Reichgelt
Dean and Professor
School of Computing and Software Engineering

The SPSU Division of Information Technology Organizational Values

The SPSU Division of Information Technology (DoIT) recognizes that its resources, expertise, and work are critical to the overall mission of the University—attracting and teaching students at the undergraduate and graduate levels. SPSU’s Division of Information Technology exists in alignment with, and in service to, students, faculty, staff and the work of the University. The SPSU DoIT recognizes that technology integration decisions are rarely of a merely technical nature, but have powerful and long-reaching effects on the critical work of teachers to teach, and of students to learn. DoIT at SPSU must model and exemplify for our students and community the appropriate application of technology to meet University needs.

SPSU DoIT organizational values include:

- **Service**—providing outstanding service to faculty, students, and staff.
- **Leadership**—anticipating and planning for issues and changes affecting SPSU.
- **Professionalism**—adhering to high standards of competence, performance, and behavior in our work.
- **Communication**—engaging in open, collaborative information sharing focused on creating opportunities and finding solutions.
- **Innovation**—proactively researching, selecting, and applying technology to enhance University capabilities.
- **Quality**—delivering excellent, reliable, and sustainable services.
- **Security**—taking diligent measures to protect the confidentiality of personal and sensitive information and to ensure access to campus resources.

SPSU DoIT Vision in Summary:

The SPSU IT division strives to deliver communications, computing, systems and support for faculty, students, and staff of a caliber of quality and reliability that are bold in application and transparent in function.

Division of Information Technology Strategic Goals

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies:

1. Integration of existing and proposed information systems

Action Items

- a.) **Integration of campus systems such as:**
 - i) **Banner and the SPSU Catalog**
 - ii) **Banner and Raisers Edges (for the Foundation)**
 - iii) **Peoplesoft and Banner**
 - iv) **Document imaging with Banner**
 - v) **Banner Enrollment Management System**
- b.) **Automate existing SPSU operation such as:**
 - i) **Electronic DR system**
 - ii) **On-line student outcomes system**
 - iii) **Dynamic employee listings**
- c.) **Integration of Data Warehouse with other systems and the SPSU website**

2. Improve the infrastructure through which the campus communicates with itself and the outside world

Action Items

- a.) **Maintain a secure, robust campus network**
- b.) **Better support the SPSU website in terms of content management and aiding users in their efforts to create content**
- c.) **Provide collaboration and community systems such as podcasting, streaming video, discussion boards, secure IM, and communications technology such as self managed email lists and electronic signage across campus**
- d.) **Implement campus-wide event scheduling system**
- e.) **Support the use of technology in the campus marketing effort**
- f.) **Enhance data center reliability through:**
 - i) **Replenishment plan for servers**
 - ii) **Replenishment plan for network hardware**
 - iii) **Implement intrusion detection and prevention system**

3. Research and promote new technologies

Action Items

- a.) **Identify trends and new technologies that impact university operations, and inform appropriate departments.**
- b.) **Review existing university processes and develop recommendations for process improvement.**
- c.) **Pilot new technologies and aggressively roll out tested technologies when as resources become available.**

d) Develop cost models and support requirements for new technologies and projects before acquisition to insure long-term support capabilities.

4. Proactively seek opportunities to empower users to better use existing technologies

Action Items

- a.) Engage in proactive discussions with administrative units to find opportunities to use technology to improve their operations**
- b.) Assist SPSU service departments with the extension of services for students who attend in non-traditional hours and/or at a distance**
- c.) Implement a permanent workstation replenishment plan**
- d.) Deploy technology that improves reliability and support, such as thin client technology, where appropriate**
- e.) Build and identify technology solutions that match the needs of faculty who teach distance learning courses.**
- f.) Provide training for faculty staff and students**

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

1. Provide IT infrastructure to enable delivery of education via distance

Action Items

- a.) Research and recommend new technologies and for distance learning as part of the distance learning task force
- b.) Identify internal and external support resources for student technical support
- c.) Build application delivery server cluster to enable distance students to access campus resources
- d.) Support faculty efforts to remotely access/monitor/manage lab equipment from a distance

2. Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.

Action Items

- a.) Collaborate with the Center for Teaching Excellence to research new technologies with the assistance of faculty
- b.) Coordinate brown bag sessions for faculty that cover trends in technology, as a means of helping measure faculty interest in new technology
- c.) Partner with the Instructional Design staff to develop faculty training on distance learning technology
- d.) Construct isolated research network to allow for riskier research projects
- e.) Support student learning by working with information technology related disciplines to identify opportunities to collaborate with faculty and students on course projects and research.

3. Provide and maintain state of the art levels of technology across SPSU learning spaces.

Action Items

- a.) Develop a multi-tiered learning space plan with assistance from academic affairs, and implement to include:
 - i) Work with the registrar's office to account for classroom technology room coding
 - ii) Continuously update classroom technology list web page to provide current room configuration information
- b.) Continuous improvement in campus wireless to maximize non-traditional learning spaces (halls, outdoors, etc.)
- c.) Maintain an ongoing list of funding needs for replenishment programs and new technology acquisitions.

4. Empower faculty to use current technologies to enhance learning opportunities for all SPSU students.

Action Items

- a.) Promote current DoIT services and provide an overview session each semester that provides faculty with an overview of available technology**
- b.) Provide orientation sessions for classroom technology to faculty**
- c.) Further enhance the DoIT video studio to a state of the art production facility**

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

- 1. Accessible, well maintained and easy to use document showing what IT services are available and how to use them.**

Action Items

- a.) Revise DoIT web site to improve ease of use to include:
 - i) Update the DoIT services list and identify missing documentation**
 - ii) Review existing documentation and make updates as needed****
- b.) Create and staff a documentation and training group within DoIT**

- 2. Create a DoIT steering committee with representation from each academic school and each administrative unit to actively participate in the operation of the Division of Information Technology.**

Action Items

- a.) Determine whether it would be preferable to seek a revision of the UITAC for this purpose or retain UITAC in its current configuration and a differently configured steering committee.**
- b.) Develop a charter for an organization that meets frequently (no less than monthly) and is heavily involved both strategically and operationally to include:
 - i) Keep current on current and pending DoIT issues and projects**
 - ii) Aid in developing campus-wide priorities of DoIT projects**
 - iii) Provide feedback regarding the quality of service provided by DoIT****
- c.) Assemble the committee and begin to meet**

- 3. Improve feedback mechanisms to allow for continuous assessment and enhancement of IT service.**

Action Items

- a.) Develop and communicate a sustainable assessment process for DoIT services
 - i) Work order feedback**
 - ii) Satisfaction surveys**
 - iii) Departmental meetings****
- b.) Develop student projects to test the usability of DoIT solutions**
- c.) Develop active Data Center down-time tracking system to both communicate status as well as track performance and improvement**
- d.) Post-implementation audits for DoIT projects**
- e.) Report assessment information and major accomplishments through a yearly DoIT report**

- 4. Increase opportunities for collaborative input regarding future needs.**

Action Items

- a.) Continue with departmental meetings on a regular basis**

- b.) **Engage consultants who are subject matter experts in roundtable discussions with users to determine strategies, synergies and opportunities for improvement**
 - c.) **Sponsor regular technology-worker roundtable discussions**
 - d.) **Hold regular DoIT “open houses” and “town hall” events**
5. **Foster and facilitate knowledge-sharing communities to define training needs and identify resources to address those needs.**

Action Items

- a.) **Develop a list of IT services or systems that would be appropriate technical communication/information design documentation projects and work with faculty to have students perform work in relevant courses**
- b.) **Work closely with the Center for Teaching Excellence to identify faculty training needs and the appropriate subject matter experts to deliver the training**
- c.) **Investigate training needs via surveys, interviews, helpdesk work order reviews, and new technology deployment schedules to include:**
 - i) **Engaging faculty groups to talk about training needs**
 - ii) **Engage staff groups to talk about training needs**
 - iii) **Develop and communicate training schedule to meet needs**
- d.) **Create and maintain a list of IT knowledge experts to encourage users to help each other and to promote “birds of a feather” conversations**

Appendices

Appendix A: Objectives Development for DoIT Strategic Planning Goals

Appendix B: *deleted by recommendation of UITAC*

Appendix C: Current State of the Division of Information Technology

Appendix D: Current FTE – Basic Services Spreadsheet

Appendix A

Objectives Development for DoIT Strategic Planning Goals

Following is a list of development worksheets which provide background, context, duration, funding and staffing details for the action items contained in the DoIT strategic plan. Some items have been combined into single worksheets where appropriate:

- Items that are complementary in deploying a particular strategy
- Items that are steps in achieving a particular strategy or goal
- Similar items that occur in multiple locations within the plan

However, all goals/strategies/action items from the plan are represented here.

Please note that costs are estimates only. Those indicated here are strong estimates that are in many cases based on existing quotes or past purchases. However, given the dynamic nature of the IT industry's product and service offerings and users' needs, it is difficult to accurately predict capital costs beyond the near-term. Software and hardware prices can change significantly, literally overnight, and a growing enrollment will definitely affect the bottom line. This is especially important given that budget realities will likely impart a multi-year delay in the deployment of many items.

An additional note concerning FTE requirements and duration estimates: For the most part these are "best case" predictions. The FTE specified for a given action item does not necessarily apply to a single individual. Therefore, if the talents of another individual, specified in a separate, as-yet-unfulfilled action item, are required for the timely completion of a project, it is likely that the predicted duration will not be sufficient to complete the item. Refinement on these estimated will continue on an ongoing basis.

Of course, as with all planning exercises, a more detailed assessment of a project, its requirements, duration and budget will need to be made just prior to embarking upon it.

Thank you to Professor Bob Brown for providing the development template and other planning tools.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

a.) Integration of campus systems such as:

i) Banner and the SPSU Catalog

Additionally, the same data is manually entered into the catalog, various web sites, and various other publications. This goal seeks to provide a consistent means of migrating information from Banner into other repositories/publications to ensure consistency and eliminate repeated effort.

Deliverable: Centralized catalog data repository

| | |
|-------------------------|---------------|
| Capital cost: | \$60,000 |
| Annual recurring cost: | \$ 6,000 |
| Initial personnel | |
| Information technology: | 0.10 FTE |
| Other departments | 0.15 FTE |
| Ongoing personnel | |
| Information technology | 0.02 FTE |
| Other departments | 0.05 FTE |
| Objective status: | New, unranked |
| Projected duration: | 8 weeks |
| Projected completion: | TBD |
| Priority: | 1 |

Note: Ongoing non-DoIT personnel does NOT include time to create/maintain course information

Planning assumptions: Costs include price of calendar integration server, hardware and training

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

- a.) **Integration of campus systems such as:**
 - ii) **Banner and Raisers Edge (for the Foundation)**

Objective: Currently, the import of recent graduate information from Banner into Raisers Edge is a time intensive manual process performed at the end of each semester. This action item seeks to automate this process as much as possible, thereby improving efficiency and improving the Alumni Office’s ability to reach new alumni immediately after graduation. DoIT does not currently have the personnel resources to implement this complicated automation software and BlackBaud (authors of Raisers Edge) do not currently have a Banner import tool planned.

Deliverable: Automated graduate data importing from Banner to Raiser’s Edge

| | |
|-------------------------|---------------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.1 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.01 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | 5 weeks |
| Projected completion: | TBD |
| Priority: | 2 |

Note: This action item would be superseded by action item 1.a.v (Banner Enrollment Management System)

Planning assumptions: System will be deployed on existing DoIT application servers

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

a.) Integration of campus systems such as:

iii) Peoplesoft and Banner

Objective: This project was added to the list as a result departmental meeting during Spring 07. It needs to be fleshed out in more detail before a scope can be attached. As yet the objectives are unknown. The resources allocated here are the DoIT resources (manpower) required to define the project scope, resources required, deliverables and estimated completion date.

Deliverable: Undefined

Capital cost:

Initial personnel

Information technology: 0.02 FTE

Other departments

Annual recurring cost:

Information technology:

Ongoing personnel

Information technology

Other departments

Objective status:

Projected duration:

Projected completion: TBD

Priority: 3

Note:

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

- a.) Integration of campus systems such as:
 - iv) Document imaging with Banner

Objective: Currently, any paper documents associated with enrolling students are kept in paper files. This action item would employ a scanning system to digitize any paper documents and a storage system to allow viewing of the documents by necessary personnel.

Deliverable: Document scanning system with permissions-based, distributed viewing capability

| | |
|-------------------------|--|
| Capital cost: | \$100,000 |
| Annual recurring cost: | \$ 8,000 |
| Initial personnel | |
| Information technology: | 0.20 FTE |
| Other departments | 0.12 FTE |
| Ongoing personnel | |
| Information technology | 0.02 FTE |
| Other departments | 0.20 FTE |
| Objective status: | New. \$5K allocated in spring 2008 for research of prospective systems |
| Projected duration: | 12 weeks |
| Projected completion: | TBD |
| Priority: | 2 |

Note: Does NOT include costs to digitize existing paper records

Planning assumptions: Cost includes software system, training, server hardware and storage network upgrades to accommodate digitized data. Non-IT time includes initial repository and permissions setup by Registrar's and other staff

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

- a.) Integration of campus systems such as:
- v) Banner Enrollment Management System

Objective: The Banner Enrollment Management System (BEMS) is a customer relationship management (CRM) add-on for Banner. The current USG Banner deployment lacks the communications and CRM tools to provide true “cradle-to-grave” management and assessment of the student experience. It also provides a rich set of performance indicator tools. It will eventually contain modules for student retention and for alumni.

Deliverable: Banner-based and –integrated CRM system

| | |
|-------------------------|---------------|
| Capital cost: | \$250,000 |
| Annual recurring cost: | \$ 25,000 |
| Initial personnel | |
| Information technology: | 0.22 FTE |
| Other departments | 0.12 FTE |
| Ongoing personnel | |
| Information technology | 0.12 FTE |
| Other departments | 0.2 FTE |
| Objective status: | New, unranked |
| Projected duration: | 6 months |
| Projected completion: | TBD |
| Priority: | 2 |

Note: Could potentially supersede the implementation of action item 1.a.2 (Raisers Edge integration) depending on date of deployment and availability of alumni module

Planning assumptions: Cost includes software system, training, server(s) hardware.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

b.) Automate existing SPSU operations such as:

i) Electronic DR system

Objective: The ordering of goods and services via Purchase Order on the SPSU campus is mainly a paper-based operation. This action item seeks to improve this process by automating the Departmental Request, IT Approval (EDP), and signatory processes into a single online application.

Deliverable: Online ordering process

Capital cost: none

Annual recurring cost: none

Initial personnel

Information technology: 0.15 FTE

Other departments: none

Ongoing personnel

Information technology: 0.01 FTE

Other departments: none

Objective status: The majority of the code was written and tested several years ago but was delayed due to PeopleSoft implementation. Documentation needs to be developed and a significant amount of user training delivered.

Projected duration: 3 months

Projected completion: TBD

Priority: 1

Note: May be superseded by PeopleSoft upgrades scheduled for spring 2008

Planning assumptions: System will be deployed on existing DoIT application servers

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

- b.) Automate existing SPSU operations such as:
 - ii) On-line student outcomes system****

Objective: To create a system whereby classroom student outcomes are standardized and applied across all SPSU courses. As outcomes are ratified by departments they are entered into a central system and normalized so as to avoid duplication. The system would also provide linkages between outcomes and strategic planning to provide a clear relationship between planning and assessment within Academic Affairs. This information would be invaluable for use in various accreditation processes.

Deliverable: Centralized system for maintaining and assessing student outcomes

Capital cost: none

Annual recurring cost: none

Initial personnel

Information technology: 0.20 FTE

Other departments none

Ongoing personnel

Information technology 0.06 FTE

Other departments none

Objective status: Initial phase of system has been written and is awaiting final approval of the VPAA, with additional code to follow as required. This project is currently scheduled to be accomplished with existing staff.

Projected duration: 3 months

Projected completion: TBD

Priority: 1

Note: Personnel needs in other departments does NOT include the time required to create and enter outcomes data into the system

Planning assumptions: System will be deployed on existing DoIT application servers

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

- b.) Automate existing SPSU operation such as:**
- iii) Dynamic employee listings**

Objective: To create a unified online account creation, management and directory system. This action item would extend the existing account management system to allow creation of new accounts by the Human Resources (HR) department, allowing for account creation for new hires in a much timelier manner than current practice allows. This system would also access PeopleSoft to allow for more accurate account deletion when an employee has left the University. This system would also provide a means for employees to self-manage their directory data (title, room/phone #, etc.). Finally, directory data would be displayed in a format that would make it much less susceptible to harvesting by spammers.

Deliverable: Unified, online account and directory system

| | |
|-------------------------|----------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.20 FTE |
| Other departments | 0.07 FTE |
| Ongoing personnel | |
| Information technology | 0.01 FTE |
| Other departments | 0.16 FTE |

Objective status: In progress. Code is mostly written. Awaiting clarification of PeopleSoft integration interfaces and then final testing by HR. New online directory is currently deployed, but unannounced pending final data entry by HR. This project is scheduled to be completed with existing staff.

| | |
|-----------------------|----------|
| Projected duration: | 4 months |
| Projected completion: | 12/2007 |
| Priority: | 1 |

Note:

Planning assumptions: System will be deployed on existing DoIT application servers.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

1. Integration of existing and proposed information systems

Action Items

c.) Integration of Data Warehouse with other systems and the SPSU website

Objective: This project has been talked about in various venues for a considerable time without any detailed requirements. As yet the objectives are unknown. The resources allocated here are the DoIT resources (manpower) required to define the project scope, resources required, deliverables and estimated completion date.

Deliverable: Undefined

Capital cost:

Initial personnel

Information technology: 0.08 FTE

Other departments

Annual recurring cost:

Information technology:

Ongoing personnel

Information technology

Other departments

Objective status:

Projected duration:

Projected completion: TBD

Priority: 3

Note:

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. Improve the infrastructure through which the campus communicates with itself and the outside world

Action Items

a.) Maintain a secure, robust campus network

Objective: To improve the security and reliability of the SPSU campus network through:

Structured patch management

Improved network and systems operations documentation

More closely monitored backup process

Enhanced security, disaster and reliability monitoring

Improved logging

More timely implementation of new software/firmware updates

Improved reaction to capacity/content throughput events

Deliverable: A more secure and robust networking experience for the SPSU community

| | |
|-------------------------|-------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | 1.0 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 1.0 FTE |
| Other departments | none |
| Objective status: | New/ongoing |
| Projected duration: | Ongoing |
| Projected completion: | Ongoing |
| Priority: | 1 |

Note:

Planning assumptions: This action item focuses on improving existing services and expediting the rollout of new services. Basically, the addition of 1 new staff member.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- b.) **Better support the SPSU website in terms of content management and aiding users in their efforts to create content**

Objective: Enhance the ability for faculty and staff to post content and in a manner consistent with the standard “look and feel” of the SPSU website through the deployment of a content management system and/or additional FTE to better assist/advise users in creating and deploying content.

Deliverable: A better web posting experience for the SPSU community

| | |
|-------------------------|---------------|
| Capital cost: | \$10,000* |
| Annual recurring cost: | unknown* |
| Initial personnel | |
| Information technology: | 0.5 0FTE |
| Other departments | significant |
| Ongoing personnel | |
| Information technology | 0.50 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | 9 months |
| Projected completion: | TBD |
| Priority: | 1 |

Note: *this amount would be for the evaluation and testing of prospective content management systems. It is anticipated that these dollars could in part be applied to the final project (i.e. hardware, software licenses). Actual implementation/maintenance costs could be considerably higher depending on the system(s) chosen, whether contractors would be hired to port existing content, etc.

Planning assumptions: FTE/duration estimates are based on evaluation AND implementation needs for a final product. If a content management system is not purchased, the manpower will be utilized to provide as much support as possible.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- c.) **Provide collaboration and community systems such as podcasting, streaming video, discussion boards, secure IM, and communications technology such as self managed email lists and electronic signage across campus**

Objective: DoIT currently offers many of these systems in one form or another. This action item is basically to provide the staffing that allows DoIT to make a commitment to continue to deploy and/or enhance these types of systems, improve implementation times, and make access to these systems more pervasive.

Deliverable: Better collaboration/communications tools for faculty, students and staff

| | |
|-------------------------|-------------|
| Capital cost: | \$90,000* |
| Annual recurring cost: | unknown |
| Initial personnel | |
| Information technology: | 0.50 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.50 FTE |
| Other departments | none |
| Objective status: | New/ongoing |
| Projected duration: | ongoing |
| Projected completion: | ongoing |
| Priority: | 2 |

Note: *capital costs are provided for the implementation of electronic signage ONLY. If other software solutions become available, they will be treated as separate projects.

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- d.) **Implement campus-wide event scheduling system**

Objective: The University currently employs systems for personal/shared calendars and a centralized event calendar. What is lacking is a centralized way to schedule rooms and other meeting resources for classes and events based on calendar items. The purpose of this action item is to purchase an Events Management System to aid in room and resource scheduling.

Deliverable: A centralized system for scheduling rooms and resources

| | |
|-------------------------|----------|
| Capital cost: | \$50,000 |
| Annual recurring cost: | \$ 5,000 |
| Initial personnel | |
| Information technology: | 0.15 FTE |
| Other departments | 0.20 FTE |
| Ongoing personnel | |
| Information technology | 0.02 FTE |
| Other departments | 0.15 FTE |
| Objective status: | |
| Projected duration: | 3 months |
| Projected completion: | TBD |
| Priority: | 1 |

Note: Personnel requirements in other departments include initially populating the system with existing room and resources objects and porting existing events as well as ongoing tasks such as altering room and resource data, scheduling events, etc.

Planning assumptions: Costs include software, training and server hardware

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- e.) **Support the use of technology in the campus marketing effort**

Objective: For some time now the marketing areas of the campus have been seeking to better utilize technology in their recruitment and public relations efforts, but DoIT has lacked the personnel resources to accommodate many of these requests. This action item constitutes a commitment by the DoIT to offer better tools and assistance in future efforts. Basically, this amounts to additional FTE.

Deliverable: Better marketing through technology

| | |
|-------------------------|--------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | TBD |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.12 FTE |
| Other departments | none |
| Objective status: | New/unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 1 |

Note:

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. Improve the infrastructure through which the campus communicates with itself and the outside world

Action Items

- f.) Enhance data center reliability through:**
 - i) Replenishment plan for servers**

Objective: Currently, no cash resources are available to routinely upgrade server and storage hardware as it ages. Instead, the originating department is asked to purchase a new system when/if they have funds available. When funding does not exist, servers are pushed beyond a reasonable life expectancy. This results in unreliable services that often cannot be patched or upgraded due to hardware incompatibility. Further, the DoIT incurs are maintenance liability due to constant efforts to keep old hardware barely functioning. This action item therefore seeks to develop a responsible plan for server and storage hardware replenishment.

Deliverable: More reliable services and predictable budgeting for technology

| | |
|-------------------------|---------------|
| Capital cost: | \$175,000 |
| Annual recurring cost: | \$175,000 |
| Initial personnel | |
| Information technology: | 0.20 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.10 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | TBD |
| Priority: | 2 |

Note: Total estimated Data Center server/storage value > \$700,000

Planning assumptions: Typically, servers are purchased with 3 years of warranty and can reasonably be extended to a 4th year of service. Storage systems are less predictable due to vendor end-of-life timelines. The DoIT Data Center currently houses ~75 servers and several storage systems and supporting infrastructure. Not all servers/systems age at the same rate. Therefore it should be understood that the \$175,000 is an average annualized cost; some years may be substantially higher or lower depending on the items needing to be replaced.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- f.) **Enhance data center reliability through:**
ii) **Replenishment plan for network hardware**

Objective: The DoIT maintains SPSU-owned networking equipment in 25 campus buildings (also wireless in many of those buildings). In addition, several buildings (A, C, H, J) house multiple devices. The SPSU Data Center in bldg H also contains the campus core router device as well as several dedicated networking appliances (packet shapers, firewalls, wireless core, etc). To date, the DoIT has had to request special funding whenever equipment has needed to be replaced. When this funding is not available the DoIT has had to find creative ways to upgrade the equipment or else waste essential manpower attempting to keep unsupported equipment functioning. As a result, reliability and productivity have often suffered. This action item seeks to employ a regular, responsible plan for ongoing replenishment of networking equipment.

Deliverable: More reliable services and predictable budgeting for technology

| | |
|-------------------------|---------------|
| Capital cost: | \$180,000 |
| Annual recurring cost: | \$180,000 |
| Initial personnel | |
| Information technology: | 0.15 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.15 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 2 |

Note: Total estimated SPSU network infrastructure value > \$1.1 million

Planning assumptions: Typically, switch gear has a reasonable life expectancy of 6 years. This can change based on load requirements, vendor end of life events, etc.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

2. **Improve the infrastructure through which the campus communicates with itself and the outside world**

Action Items

- f.) **Enhance data center reliability through:**
 - iii) **Implement intrusion detection and prevention system**

Objective: The DoIT currently rely on built-in firewall and intrusion detection (ID) capabilities on servers, firewalls and networking equipment. The quality of these built-in services vary by vendor, age, etc. and do not achieve nearly the capabilities of commercial third-party systems. Furthermore, integrated commercial systems have the ability to view activities across the entire campus network, identifying distributed, yet coordinated attacks.

Deliverable: An integrated server/network Intrusion Detection and Prevention system

| | |
|-------------------------|---------------|
| Capital cost: | \$150,000 |
| Annual recurring cost: | \$ 15,000 |
| Initial personnel | |
| Information technology: | 0.15 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.25 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | 6 weeks |
| Projected completion: | TBD |
| Priority: | 1 |

Note: DoIT previously employed server-based ID on several systems but lacked the staff to adequately monitor it. Maintenance was allowed to lapse and currently no coordinated ID is employed.

Planning assumptions: Costs include ID software for most critical servers, network-based ID software and server hardware for inspection/monitoring.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

3. Research and promote new technologies

Action Items

- a.) Identify trends and new technologies that impact university operations, and inform appropriate departments.
- b.) Review existing university processes and develop recommendations for process improvement.
- c.) Pilot new technologies and aggressively roll out tested technologies when resources become available.
- d.) Develop cost models and support requirements for new technologies and projects before acquisition to insure long-term support capabilities.

Objective: The DoIT staff make a point of keeping abreast of emerging business- and academic- related technologies. Nevertheless, with currently available resources end-users, state-of-the-practice or other external influences are often the de-facto drivers behind the implementation of new technologies. This strategy seeks to make available the resources to allow the DoIT to pro-actively identify, research, test, deploy and promote new technologies in a timely fashion.

Deliverable: Technology deployments in keeping with the tag line of Georgia’s Technology University

| | |
|-------------------------|---------------|
| Capital cost: | \$15,000* |
| Annual recurring cost: | \$15,000* |
| Initial personnel | |
| Information technology: | 0.50 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.50 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | ongoing |
| Projected completion: | ongoing |
| Priority: | 1 |

Note: *These costs are to provide the seed money for ongoing research and evaluation of new technologies. Any new systems being considered for deployment would themselves have to be evaluated and budgeted prior to implementation.

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

- 4. Proactively seek opportunities to empower users to better use existing technologies**

Action Items

- a.) Engage in proactive discussions with administrative units to find opportunities to use technology to improve their operations**
- b.) Assist SPSU service departments with the extension of services for students who attend in non-traditional hours and/or at a distance**

Objective: To meet with administrative/service departments on a quarterly/semester basis to determine where technology can be used to improve operations and or extend hour for distance students. The topics discussed may vary from putting a form on line and storing in a database to acquisition, installation and operation of a major software package. Basically, this amounts to additional FTE to develop the future enhancements needed by campus.

Deliverable: A list of projects, with associated resource requirements and deliverable which can then be prioritized along with other campus projects.

| | |
|-------------------------|--------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | TBD |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.16 FTE |
| Other departments | none |
| Objective status: | New/unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 1 |

Note:

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

4. Proactively seek opportunities to empower users to better use existing technologies

Action Items

c.) Implement a permanent workstation replenishment plan

Objective: Workstations will be replaced after four years on a rotating schedule that replaces 25% of workstations each year.

Deliverable: Workstations replaced as scheduled each month.

| | |
|-------------------------|---------------|
| Capital cost: | \$350,000 |
| Annual recurring cost: | \$350,000 |
| Initial personnel | |
| Information technology: | 2.00 FTE |
| Other departments: | 0.15 FTE |
| Ongoing personnel | |
| Information technology | 2.00 FTE |
| Other departments | 0.15 FTE |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | TBD |
| Priority: | 1 |

Note: *This strategy has cost and personnel interdependencies with action item 1.4.d – Exploring Thin Client Technologies*

Planning assumptions:

- SPSU has 1,600 workstations. Future plans must account for increases.
- Replacement costs:
 - PC workstation: \$800
 - Macintosh (Mac mini w/monitor): \$1500
 - PC Laptop: \$1800
 - Mac Laptop: \$2,300
 - Monitor: \$250 (monitors typically last longer than 4 years)
- No more than 25% of workstations will be replaced each year in the first four years, even if more than 25% are over four years old.
- One day (about seven hours) is required to replace a workstation.

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

4. Proactively seek opportunities to empower users to better use existing technologies

Action Items

d.) Deploy technology that improves reliability and support, such as thin client technology, where appropriate

Objective: Reduce time-to-deploy, hardware break-fix events, noise and power consumption by replacing – where reasonable – traditional workstations with thin-client technologies.

Deliverable:

| | |
|-------------------------|---|
| Capital cost: | \$125,000 |
| Annual recurring cost: | TBD, based on deployments, pilot successes, etc. Ongoing costs funded by 1.4.c, Workstation Replenishment Program |
| Initial personnel | |
| Information technology: | 0.2 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0 FTE, assuming personnel supplied by 1.4.c, Workstation Replenishment Program |
| Other departments | none |
| Objective status: | Currently testing on a limited basis in Chem II lab |
| Projected duration: | 1 year |
| Projected completion: | TBD |
| Priority: | 2 |

Note: Deploying thin clients typically do not reduce overall costs, but rather shift costs from the field to the Data Center. In addition, Desktop Support productivity is enhanced due to the reduced need for field visits by technicians. *This strategy has cost and personnel interdependencies with action item 1.4.c – Workstation Replenishment Plan*

Planning assumptions: Extensive testing and evaluation will need to occur. Several tiers of thin-client will be required:

- Standard thin client accessing Terminal Services farm
- Standard thin client accessing virtualized Windows workstation session
- “Thick” clients for graphics-intensive users or those requiring extensive peripherals

Cost estimates include testing/evaluation costs, implementation of redundant server farm, acquisition of near-line storage system(s) for virtualized clients and user data

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

- 4. Proactively seek opportunities to empower users to better use existing technologies**

Action Items

- e.) Build and identify technology solutions that match the needs of faculty who teach distance learning courses.**

Objective: The goal of this project is to research and meet with faculty who teach distance learning courses to determine unmet needs and/or to make faculty aware of new available technologies. This function is currently carried out by DoIT personnel on an ad hoc basis. The personnel in this plan amount to additional FTE so that DoIT can be more proactive.

Deliverable:

| | |
|-------------------------|--------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | TBD |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.10 FTE |
| Other departments | none |
| Objective status: | New/unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 1 |

Note:

Planning assumptions:

Goal 1—Provide leadership and support to the SPSU community in using technology to improve campus processes.

Strategies

4. Proactively seek opportunities to empower users to better use existing technologies

Action Items

f.) Provide training for faculty staff and students

Objective: Currently DoIT has dramatically reduced the number of training workshops offered due to lack of staffing. Training is ad hoc at best, although DoIT attempts to provide training for critical and new services. The purpose of this project is to provide new FTE to allow DoIT to proactively work with faculty, staff and students to determine what training is needed, develop the workshop and provide the training. Post workshop assessment will be part of every workshop.

Deliverable:

| | |
|-------------------------|--------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | TBD |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.50 FTE |
| Other departments | none |
| Objective status: | New/unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 1 |

Note:

Planning assumptions:

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

1. Provide IT infrastructure to enable delivery of education via distance

Action Items

- a.) **Research and recommend new technologies and for distance learning as part of the distance learning task force**
- b.) **Identify internal and external support resources for student technical support**
- c.) **Build application delivery server cluster to enable distance students to access campus resources**
- d.) **Support faculty efforts to remotely access/monitor/manage lab equipment from a distance**

Objective: Distance learning is becoming more and more an important strategy in SPSU's mission. One goal of many faculty is to become the innovators at providing distance-based laboratory education. Adequate DoIT resources, in the form of staff and research dollars, should be available to assist in that goal. Some experimentation has already begun, but it will take more to do it better.

Deliverable: Distance education initiatives keeping with the tag line, Georgia's Technology University

| | |
|-------------------------|---------------|
| Capital cost: | \$15,000 |
| Annual recurring cost: | \$15,000 |
| Initial personnel | |
| Information technology: | 0.2 FTE |
| Other departments | TDB |
| Ongoing personnel | |
| Information technology | 0.2 FTE |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | Ongoing |
| Priority: | 2 |

Note: These estimates are for the research and basic assistance of faculty and investigation of an applications delivery cluster only. As new technologies and opportunities are identified, researched, tested and deployed, additional projects and funding proposals will be generated.

Planning assumptions: Capital costs based on estimated need to acquire tools, equipment, software, server(s), etc. to assist in the research of delivery methods

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 2. Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.**

Action Items

- a.) Collaborate with the Center for Teaching Excellence to research new technologies with the assistance of faculty**

Objective: As Georgia's Technology University, the entire SPS community has high expectations for the level of technology that will be employed throughout all facets of the teaching and learning process. Adequate DoIT resources, in the form of staff and research dollars, should be available to assist in that goal. The CTE is the ideal partner for developing these new technologies.

Deliverable: Classroom and teaching technologies in keeping with the tag line, Georgia's Technology University

| | |
|-------------------------|---------------|
| Capital cost: | \$15,000 |
| Annual recurring cost: | \$15,000 |
| Initial personnel | |
| Information technology: | 0.25 FTE |
| Other departments | TDB |
| Ongoing personnel | |
| Information technology | 0.25 FTE |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | Ongoing |
| Priority: | 1 |

Note: These estimates are for the research and basic assistance of faculty only. As new technologies and opportunities are identified, researched, tested and deployed, additional projects and funding proposals will be generated.

Planning assumptions: Capital costs based on estimated need to acquire tools, software, devices, server(s), etc. to assist in the research of teaching technologies.

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 2. Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.**

Action Items

- b.) Coordinate brown bag sessions for faculty that cover trends in technology, as a means of helping measure faculty interest in new technology**

Objective: The DoIT needs to be more aware of issues, needs and concerns of its constituents. Regular, less formal gatherings of users and DoIT personnel would enhance this communication and create understanding, forming a partnership between faculty and the DoIT.

Deliverable: Better communication and understanding with faculty

| | |
|-------------------------|---------------|
| Capital cost: | \$1000 |
| Annual recurring cost: | \$1000 |
| Initial personnel | |
| Information technology: | 0.18 FTE |
| Other departments | TBD |
| Ongoing personnel | |
| Information technology | 0.18 FTE |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | ongoing |
| Projected completion: | ongoing |
| Priority: | 1 |

Note:

Planning assumptions: Occasional costs for food, supplies, venue, guests, etc. may be incurred. FTE is based on 2@ 1-hour lunches plus planning time per month.

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

2. **Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.**

Action Items

- c.) **Partner with the Instructional Design staff to develop faculty training on distance learning technology**

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

5. **Foster and facilitate knowledge-sharing communities to define training needs and identify resources to address those needs.**

Action Items

- b.) **Work closely with the Center for Teaching Excellence to identify faculty training needs and the appropriate subject matter experts to deliver the training**

Objective: Develop required training and tools required for faculty who teach on-line courses. The ultimate goal would be to develop this training into a certificate program.

Deliverable: A number of tools (both physical and pedagogical), and training for faculty.

Capital cost: \$5,000 (depending on number trained)

Annual recurring cost: \$3,000 (depending on number trained)

Initial personnel

Information technology: .20 FTE

Other departments .20 FTE

Ongoing personnel

Information technology .20 FTE

Other departments .20 FTE

Objective status: New, unranked

Projected duration: Ongoing

Projected completion: Ongoing

Priority: 1

Note: Capital costs include training materials and a hardware/software bundle for trainees.

Planning assumptions: DoIT, CTE and the Instructional Designer will work together to design the training needs, assemble the materials and actual conduct training in group and individual sessions.

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 2. Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.**

Action Items

- d.) Construct isolated research network to allow for riskier research projects**

Objective: Frequently, faculty propose new systems and applications that incur risk for various reasons. Sometimes the risks are well-known issues within the IT security community, cause bandwidth concerns, etc.. However, it is often the case that the proposed system lies far outside of the existing DoIT support footprint and/or insufficient DoIT staffing exists to adequately monitor and react to problems, intrusions, etc. The purpose of this action item is to investigate the resources necessary to construct and maintain an isolated research network, physically separate from the main campus network, which could be used by DoIT and the faculty to conduct research without jeopardizing critical SPSU operations.

Deliverable: Cost and FTE estimates for the creation of such a network

| | |
|-------------------------|---------------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.1 FTE |
| Other departments | TBD |
| Ongoing personnel | |
| Information technology | TBD |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | 6 months |
| Projected completion: | TBD |
| Priority: | 3 |

Note: A rough estimate of the final cost of constructing such a network would be in the \$150,000 range and would require 0.20 FTE ongoing to support

Planning assumptions: PeachNet is able and willing to provide additional Internet bandwidth for research purposes

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

2. **Research and promote new tools for faculty to enhance their teaching effectiveness and scholarship.**

Action Items

- e.) **Support student learning by working with information technology related disciplines to identify opportunities to collaborate with faculty and students on course projects and research**

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

5. **Foster and facilitate knowledge-sharing communities to define training needs and identify resources to address those needs.**

Action Items

- a.) **Develop a list of IT services or systems that would be appropriate technical communication/information design documentation projects and work with faculty to have students perform work in relevant courses**

Objective: DoIT staff represent a pool of considerable IT knowledge and experience. Additionally, many of the projects and services performed are of a “real world” nature. Ideally, these talents and opportunities could serve as valuable tools in the education of SPSU students. DoIT would prefer to be more involved in providing learning and development opportunities for students, however, sufficient staff resources do not exist to provide the significant amount of training, supervision, debugging, troubleshooting and editing that student-led projects require. The purpose of this action item is to acquire additional DoIT staff sufficient to allow more, and more effective, interaction with students and student projects.

Deliverable: More students gaining access to real-world training and experience

| | |
|-------------------------|---------------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.25 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.25 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |

Projected completion:
Priority:

Ongoing
1

Note:

Planning assumptions:

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 3. Provide and maintain state of the art levels of technology across SPSU learning spaces.**

Action Items

- a.) Develop a multi-tiered learning space plan with assistance from academic affairs, and implement to include:**
- i) Work with the registrar's office to account for classroom technology room coding**
 - ii) Continuously update classroom technology list web page to provide current room configuration information**

Objective: Ensure that the classroom technology list reflects changes made prior to the current academic year and that classes can be schedule in an automated process that matches technology needs of the class with technology available in the classroom.

Deliverable: A list of current classrooms and teaching spaces on campus and updated classroom technology information within BANNER for scheduling purposes.

| | |
|-------------------------|---------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | .05 |
| Other departments | .03 |
| Ongoing personnel | |
| Information technology | TBD |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | 6 weeks |
| Projected completion: | TBD |
| Priority: | 3 |

Note: This project is to determine the scope and capital requirements to fully implement this type of automated program. The previous Event Management project may impact this project by providing the software needed for implementation with minimal cost increases.

Planning assumptions:

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 3. Provide and maintain state of the art levels of technology across SPSU learning spaces.**

Action Items

- b.) Continuous improvement in campus wireless to maximize non-traditional learning spaces (halls, outdoors, etc.)**

Objective: Today, much of the learning process takes place outside of the classroom. It is therefore imperative to provide widespread access to non-traditional delivery methods and information sources. Wireless networking plays a key role in this access. It is therefore necessary to maintain a robust wireless network that covers as much of the campus – indoors and out – as possible. This action item seeks the resources to more proactively monitor, assess, expand and upgrade the SPSU wireless network.

Deliverable: Ubiquitous, reliable campus wireless access

| | |
|-------------------------|---------------|
| Capital cost: | TBD |
| Annual recurring cost: | TBD |
| Initial personnel | |
| Information technology: | 0.20 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.20 |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | Ongoing |
| Priority: | 2 |

Note: Will soon be deploying phase III of the wireless system; will need to further assess needs after implementation. Costs can only be determined once a baseline is established.

Planning assumptions: Staffing requirements are based on being more pro-active in maintaining reliable service, additional troubleshooting of “dead spots” (i.e. determining if there is a genuine lack of coverage or RF interference, etc.)

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

3. Provide and maintain state of the art levels of technology across SPSU learning spaces.

Action Items

c.) Maintain an ongoing list of funding needs for replenishment programs and new technology acquisitions

Objective: The purpose of this project is ensuring that hardware in learning spaces is not ignored when replenishment funds or additional funds become available.

Deliverable: A current, updated list of the state of technology in all learning spaces.

| | |
|-------------------------|--------------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.02 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.01 FTE |
| Other departments | none |
| Objective status: | New/unranked |
| Projected duration: | TBD |
| Projected completion: | TBD |
| Priority: | 2 |

Note:

Planning assumptions:

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 4. Empower faculty to use current technologies to enhance learning opportunities for all SPSU students.**

Action Items

- a.) Promote current DoIT services and provide an overview session each semester that provides faculty with an overview of available technology**
- b.) Provide orientation sessions for classroom technology to faculty**

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

- 1. Accessible, well maintained and easy to use document showing what IT services are available and how to use them.**

Action Items

- a.) Revise DoIT web site to improve ease of use to include:
 - i) Update the DoIT services list and identify missing documentation**
 - ii) Review existing documentation and make updates as needed****
- b.) Create and staff a documentation and training group within DoIT**

- 5. Foster and facilitate knowledge-sharing communities to define training needs and identify resources to address those needs.**

Action Items

- c.) Investigate training needs via surveys, interviews, helpdesk work order reviews, and new technology deployment schedules to include:
 - i) Engaging faculty groups to talk about training needs**
 - ii) Engage staff groups to talk about training needs**
 - iii) Develop and communicate training schedule to meet needs****
- d.) Create and maintain a list of IT knowledge experts to encourage users to help each other and to promote “birds of a feather” conversations**

Objective: In many cases, DoIT is derided for a lacking service which is actually available, but is simply not well publicized. Even then, being aware of a technology is a far cry from understanding how to use it. Communication is the key. The purpose of this action item is to acquire additional staff resources in DoIT to better gather, document, publicize, provide training for, and improve communications concerning services provided by the Division.

Deliverable: Better campus understanding of the available resources and how to use them.

| | |
|-------------------------|---------------|
| Capital cost: | \$2500 |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.25 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 1.0 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | 4 months |
| Projected completion: | Ongoing |
| Priority: | 1 |

Note:

Planning assumptions: Initial FTE and duration estimates are based on startup documentation, conversations with users and training design. Initial costs are for a workstation and software for 1 new employee, plus supplies.

Goal 2— Support and enhance the University's vision of being the best in the world at innovative use of technology to teach across all disciplines.

Strategies

- 4. Empower faculty to use current technologies to enhance learning opportunities for all SPSU students.**

Action Items

- c.) Further enhance the DoIT video studio to a state of the art production facility**

Objective: Objective: Enhance existing studio space in Building H to provide space appropriate for video/audio production to meet the instructional needs of faculty, including distance learning faculty.

Deliverable: Studio equipped with video and audio editing hardware that supports the development of instructional materials.

| | |
|-------------------------|------------------------------|
| Initial capital cost: | \$35,000 |
| Recurring capital cost: | \$ 5,000 |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.30 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.50 FTE |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected start: | TBD pending priority setting |
| Priority: | 3 |

Note:

Planning assumptions:

Action Item 3.1.a: See Goal 2.4.a/b

Action Item 3.1.b: See Goal 2.4.a/b

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

- 3. Improve feedback mechanisms to allow for continuous assessment and enhancement of IT service.**

Action Items

- a.) **Develop and communicate a sustainable assessment process for DoIT services**
 - i) **Work order feedback**
 - ii) **Satisfaction surveys**
 - iii) **Departmental meetings**
- b.) **Develop student projects to test the usability of DoIT solutions**
- c.) **Develop active Data Center down-time tracking system to both communicate status as well as track performance and improvement**
- d.) **Post-implementation audits for DoIT projects**
- e.) **Report assessment information and major accomplishments through a yearly DoIT report**

Objective: Traditionally, the DoIT has been in mostly a reactive mode. All of the available time has been spent working on projects, reacting to emergencies and performing break/fix operations. The small amount of time committed to assessment has been devoted to interpreting user surveys and other feedback. Little or no time has been available for assessment of projects completed, nor for communicating those results to the campus. This action item seeks to provide personnel resources to perform better assessment within the DoIT.

Deliverable: Greater DoIT accountability and more effective planning

| | |
|-------------------------|---------------|
| Capital cost: | none |
| Annual recurring cost: | none |
| Initial personnel | |
| Information technology: | 0.20 FTE |
| Other departments | none |
| Ongoing personnel | |
| Information technology | 0.25 |
| Other departments | none |
| Objective status: | New, unranked |
| Projected duration: | 3 months |
| Projected completion: | Ongoing |
| Priority: | 1 |

Note:

Planning assumptions: Duration and initial EFT time is based on creating the assessment plans and documentation.

Goal 3—Establish structures and systems to foster collaboration and communication with the SPSU community

Strategies

4. Increase opportunities for collaborative input regarding future needs.

Action Items

- a.) Continue with departmental meetings on a regular basis
- b.) Engage consultants who are subject matter experts in roundtable discussions with users to determine strategies, synergies and opportunities for improvement
- c.) Sponsor regular technology-worker roundtable discussions
- d.) Hold regular DoIT “open houses” and “Town hall” events

Objective: By increasing communications between DoIT and its users as well as between DoIT technicians and their cohorts in other departments new collaborations and synergies can be formed.

Deliverable: Better understanding between DoIT and its constituents

| | |
|-------------------------|---------------|
| Capital cost: | \$2000 |
| Annual recurring cost: | \$2000 |
| Initial personnel | |
| Information technology: | TBD |
| Other departments | TBD |
| Ongoing personnel | |
| Information technology | TBD |
| Other departments | TBD |
| Objective status: | New, unranked |
| Projected duration: | Ongoing |
| Projected completion: | Ongoing |
| Priority: | 1 |

Note:

Planning assumptions: Costs are primarily for speakers and training sessions. Personnel needs are not listed because in order to accomplish these items what is needed is more free time for existing staff. In other words, gaining additional FTE noted in other action items should free up staff time to be more collaborative/communicative.

Action Item 3.5.a: See Goal 2.2.e

Action Item 3.5.b: See Goal 2.2.c

Action Item 3.5.c: See Goal 2.4.a/b

Action Item 3.5.d: See Goal 2.4.a/b

Appendix C

Current State of the Division of Information Technology

Organizational Context

Southern Polytechnic State University (SPSU) is one of the 35 colleges and universities in the University System of Georgia. SPSU is a relatively small (approximately 4,450 students), historically “special purpose” institution that grants degrees primarily in engineering, engineering technology, architecture and the sciences. The special purpose mission of SPSU is unique in the marketplace. Many of the programs offered at SPSU are not offered anywhere else in the state. SPSU is “Georgia’s Technology University”, and has a curriculum that focuses heavily on practicum, in addition to theory. The expensive nature of the delivery of these programs has been recognized by the Board of Regents, and as a result SPSU’s tuition increases are in step with the four research universities in the university system. Additionally, in order to further accommodate the needs of the faculty and students at SPSU, the student technology fee was almost doubled in FY 2006 to ensure that the labs, classrooms, and other technology needs are met. The degree programs offered by SPSU depend heavily on information systems, and due to a strong tie to industry, require that students have universal access to at least “state of the practice” technology in order to be well prepared for their careers. The curriculum offered, combined with a high level of user awareness of technology makes managing information technology at SPSU a challenge.

The management and organizational structure

Southern Polytechnic State University has a centralized Division of Information Technology (DoIT), headed by the CIO. The CIO reports directly to the president and is a member of the senior staff of the university which meets weekly to discuss campus wide issues. DoIT is comprised of four major groups, Infrastructure, Operation/Desktop Services, Academic Support, and Enterprise Applications. The technicians in the Operations/Desktop Services group provide support for faculty and staff computers, as well as classrooms, labs, and some campus servers (license management, anti-virus, Norton ghost, etc...) that are not managed on a day-to-day basis by the Infrastructure group. The Infrastructure group is responsible for maintaining a secure, robust campus network as well as managing most of the 70 campus’ central servers. PeopleSoft, BANNER, and other systems with a campus-wide impact are managed through the Enterprise Applications group. The Academic Support Services group provides training and consultation for faculty who wish to integrate technology in their teaching and manage the DoIT’s two general access labs including the hiring and training of 20+ student assistants. Additionally, a few academic departments/schools have internal technical support staffs to work closely with the faculty on discipline specific instructional resources, some of which is not computer based.

Current state of DoIT at SPSU

During the summer of 2006, DoIT was audited by an IT auditor for the University System of Georgia. The only major audit finding was a critical staffing shortage. Based on Fall 2005 data, DoIT needed eight additional staff members (according to the auditor.) However, enrollment has grown dramatically in the past two years and the number of faculty teaching on campus has also increased. To illustrate the growth in demand for DoIT services, in 2001 there were a total of 207 full-time and part-time faculty members teaching at SPSU, in 2007 this number has increased to 272 full-time and part-time faculty members. Student enrollment has increased from 3552 in 2001 to 4459 in 2007, along with an increase in the use of distance learning as both a primary and secondary instructional delivery tool. There has been a tremendous growth in the number of server based applications required for campus operations, which has led to an increase from 20 servers in 2001 to 70+ servers in 2007. The number of classrooms with projectors installed has increased from around 10 in 2001 to over 90 in 2007. Additionally, the number of desktop computers directly supported by DoIT has grown from approximately 900 in 2001 to over 1400 in 2007. In 2001, there were 24 full-time staff members in Information Technology, now there are 22.

Educause has comparison data available for academic institutions, and according to their data, "typical" institutions have approximately one full-time professional per 137 students. However, SPSU is an institution that has a disproportionate number of technical majors and infrastructure requirements, so the personnel requirements should therefore be higher. Even at the standard 137:1 ratio, DoIT would require approximately thirty-two full time staff members to simply meet the baseline. The Division of Information Technology currently consists of 22 staff members. This staffing shortage has direct consequences for the way in which DoIT operates

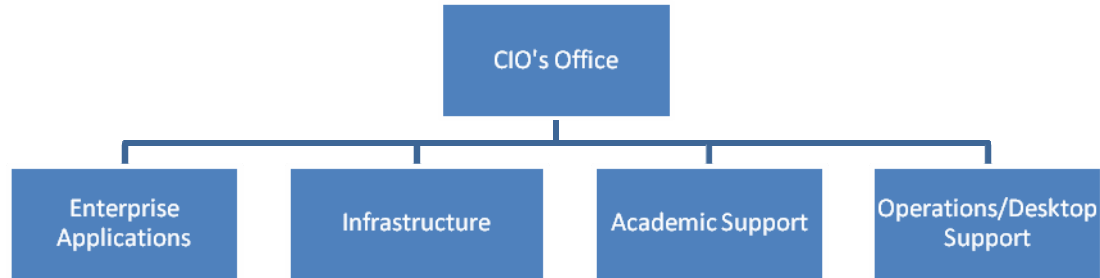
Historically, DoIT at SPSU has operated as a reactive organization, where projects undertaken by the Division have been identified or given high priority based largely on critical needs. Due to comparatively low funding levels and chronic understaffing, DoIT must focus primarily on ensuring current services continue, rather than adding the new services requested by a community which is highly aware of available technologies. Faculty, staff, and students are frequently frustrated by the speed at which DoIT is able to take on new projects, and the dynamic nature of project priorities. Faculty and staff are also concerned by the lack of transparency in project prioritization, and they are at times unaware of existing services and projects already underway in DoIT. Project priorities are frequently downgraded due to insufficient staffing, or rejected if the project poses a security risk to the rest of the campus infrastructure, again frequently due to insufficient staffing to adequately monitor and react to security events. Since all of the academic programs at SPSU require intensive information technology, there is the perception by some faculty that DoIT is limiting or even driving the technology choices for the classroom. Compounding this problem is the lack of awareness of the existing services that DoIT provides to the campus, which are often the services that faculty, staff, and students need. The university system has a strict procurement procedure which provides DoIT strong control mechanisms over the procurement of information technology on campus. This often frustrates users, and creates a confrontation when

projects are planned without DoIT involvement and then delivered for approval after users have already selected their preferred vendors and technology solutions – which may not align with campus and university system standards.

Due to the several individual funding sources available on campus, such as student technology fee, academic affairs capital replacement, distance learning and other funding sources, many projects are limited in scope and often result in piecemeal solutions to larger problems. There is rarely an opportunity to fund major projects with the ability to fund staffing, infrastructure, and other crucial components that are necessary to ensure the ability to continue to provide quality support. In order to cope with the increasing demands for new services as well as with limited funding and staffing, DoIT has attempted controlled costs through the use of automated systems and open source applications. At this time the data center has over seventy servers running various applications that are necessary for the day to day operation of the campus, and with current staffing levels it is difficult to add services while maintaining basic data center operations.

One of the special features of the campus infrastructure is the use of Voice over Internet Protocol technology for campus phone service. The entire campus was switched to the ShoreTel VoIP system, which provided immediate cost savings for the entire campus, and has provided added features such as caller-id, enhanced voice mail, and other additional functionality beyond the phone service that was previously provided by the Georgia Technology Authority.

DoIT *Functional* Areas



Management

William Gruszka - Chief Information Officer (CIO)
Ron Skopitz – Director of IT Operations
Jim Herbert - Director of IT Systems, Networks & Security
Ken Hill – Director of Enterprise Applications Support
David Edwin Stone - Director of Instructional Technology Services

Staff

Trish Buchanan - Secretary to the CIO
Christine Jenkins – Administrative Secretary

Enterprise Applications

Cynthia L McKinney - Information Systems Specialist
Kelly Payton - Database Administrator

IT Systems, Network and Security

Javier Labiosa Desktop Support Technician II
Brian Taylor - Desktop Support Technician I

Academic Support Services

Jonathan A Gilliam - Instructional Technologist
Iris Singleton - IT Labs Manager

Operations/Desktop Support

Amanda Canup, - Desktop Support Technician II
Chris Corriere - Desktop Support Technician I
Cory Fletcher -Desktop Support Technician I
Terry Gordon - Desktop Support Technician I
Emanuel Hinton - Desktop Support Technician I
Tracey McKinzie - Desktop Support Technician III
Derrick Stewart - Desktop Support Technician III
Jim Stewart - Desktop Support Technician II
Reginald Span - Desktop Support Technician I (Temporary)

Current Services

*Services that were added since 2001

- General administration and management
- ALC – HVAC controls*
- T2 – Parking Management*
- Blackboard (OneCard, print management, food service/vending)*
- Telephone System (VOIP)*
- Virus Protection*
 - (Does not include major Virus attack remediation)
- Packet Shaping*
- Spam Protection*
 - (Does not include major Spam attack remediation)
- Peoplesoft* (on-going)
- Residential Network* (Includes data, voice, and cable)
 - Does not include major issue remediation)
- Network/Data Backup System*
 - Needs not being met – requires additional .15 - .25 FTE
- Patch Management
 - Needs not being met –requires additional .70 - .80
- Campus Switchboard*
- ACEWeb – Continuing Education registration and payment system*
- BANNER
 - Ongoing
 - Web Reports
- Raiser's Edge
- Tech Fee
- Campus Helpdesk Application – Used by Facilities* and DoIT
- Desktop computer support
 - Does not include preventative maintenance
- University web site
 - Managing Services
 - Aiding Users
- Campus email and webmail system
 - Does not include break-fix
- Dynamic phone directory*
- Campus Network & security (35 buildings, 6000+ ports)
 - (Does not include break-fix)
- System Management & Security
- Donation processing for the Foundation*
- IT Helpdesk
- Campus Mailing Lists
- Financial Aid

- Hornet Discussion Board*
- Equipment Purchasing and Recommendations
- Custom Program Development
- General Access computer labs – H-242 and J-215
- Workshops and Training
- Equipment Checkout
- GeorgiaVIEW Vista (WebCT) Administration*
- Videoconferencing
- Satellite Downlinks
- Streaming Video*
- Turnitin.com*
- Podcasting*
- Class tours and guest speakers
- Technology Research
- Wireless Network*
- Technology Planning and consulting
- Training student assistants
- Several license managed campus-wide software applications that run on servers in IT
 - ESRI ARCGIS*
 - Autodesk Design Institute*
 - MathCAD*
 - MATLAB*
 - Bentley Education Network (Includes Microstation)*
 - Solidworks*
- Classroom/lab support - over 90 technology enhanced classrooms/labs
 - Does not include preventative maintenance
- <http://www.spsu.edu/infotech/smart/index.htm>
- Computer Lab setup and support
 - Does not include preventative maintenance
-

| PCB | Math | MET | CET | ARCH | IET | ETCMA | SIS | CNST |
|---------------------------|-------|-------------------------------------|------------|------|---|-------------------------------------|-----------------|-----------------|
| E-171, E-120, E-203 | D-137 | K-176, K-155, K-174, K-188 | SJ- 127 | N | M- 130, M- 131, M- 132, M- 137, M-160 | J-203, J-212, J-213, J-214 | J-216, J-218 | H-361, H-339 |

Appendix D: Current FTE – Basic Services Spreadsheet

| Service | Aggregate FTE | Instructional | Desktop/ Operations | Infrastructure | Application | Administration |
|--|---------------|---------------|---------------------|----------------|-------------|----------------|
| General administration and management | 1.90 | 0.10 | 0.25 | 0.10 | 0.10 | 1.35 |
| ALC – HVAC controls | 0.04 | - | - | 0.04 | - | - |
| T2 – Parking Management | 0.04 | - | 0.02 | 0.01 | 0.01 | - |
| Blackboard (OneCard, print management, food service/vending) | 0.15 | - | 0.10 | 0.05 | - | - |
| Telephone System (VOIP) | 0.30 | - | 0.18 | 0.02 | - | 0.10 |
| Virus Protecton | 0.06 | - | 0.02 | 0.04 | - | - |
| Packet Shaping | 0.10 | - | - | 0.10 | - | - |
| Spam Protection | 0.06 | - | 0.01 | 0.05 | - | - |
| Peoplesoft | 0.05 | - | 0.01 | 0.01 | 0.03 | - |
| Residential Network (Includes data, voice, and cable) | 0.50 | - | 0.10 | 0.40 | - | - |
| Network/Data Backup System | 0.06 | - | - | 0.06 | - | - |
| Patch Management | 0.20 | - | - | 0.20 | - | - |
| Campus Switchboard | 0.02 | 0.02 | - | - | - | - |
| BANNER | 1.25 | - | 0.10 | 0.15 | 1.00 | - |
| Raiser's Edge | 0.04 | - | 0.01 | - | 0.03 | - |
| Tech Fee | 0.80 | 0.25 | 0.20 | - | - | 0.35 |
| Campus Helpdesk Application (Facilities and DoIT) | 0.10 | - | - | - | 0.10 | - |
| Desktop computer support | 3.50 | - | 3.30 | 0.20 | - | - |
| University web site | 0.60 | 0.45 | 0.10 | 0.05 | - | - |
| Campus email and webmail system | 0.10 | - | 0.02 | 0.08 | - | - |
| Dynamic phone directory | 0.02 | - | - | 0.02 | - | - |
| Campus Network management and security (35 buildings, 2500+ devices) | 1.00 | - | 0.20 | 0.80 | - | - |
| Systems Management and Security | 0.65 | - | 0.20 | 0.45 | - | - |
| Donation processing for the Foundation | 0.01 | - | - | - | 0.01 | - |
| DoIT Helpdesk Opertaion | 1.20 | 0.25 | 0.85 | - | - | 0.10 |
| Campus Mailing Lists | 0.06 | - | - | 0.03 | 0.03 | - |
| Financial Aid | 1.20 | - | - | - | 1.20 | - |
| Hornet Discussion Board | 0.01 | - | - | 0.01 | - | - |
| Equipment Purchasing and Recommendations | 0.60 | - | 0.50 | 0.10 | - | - |
| Custom Program Development | 0.80 | - | - | - | 0.80 | - |
| General Access computer labs – H-242 and J-215 | 0.70 | 0.60 | 0.05 | 0.05 | - | - |
| Workshops and Training | 0.20 | 0.15 | 0.02 | - | - | 0.03 |
| Equipment Checkout | 0.02 | 0.02 | - | - | - | - |
| GeorgiaVIEW Vista (WebCT) Adminstration | 0.20 | 0.20 | - | - | - | - |
| Videoconferencing (<.01FTE) | 0.00 | - | - | - | - | - |
| Satellite Downlinks | 0.02 | - | - | 0.02 | - | - |
| Streaming Video | 0.05 | 0.04 | - | 0.01 | - | - |
| Turnitin.com | 0.01 | 0.01 | - | - | - | - |
| Podcasting | 0.10 | 0.10 | - | - | - | - |
| Class tours and guest speakers | 0.02 | 0.01 | - | 0.01 | - | - |
| Technology Research | 0.10 | 0.02 | 0.06 | 0.02 | - | - |
| Wireless Network | 0.15 | 0.11 | 0.01 | 0.03 | - | - |
| Train Student Workers | 0.25 | 0.20 | 0.05 | - | - | - |
| Technology Planning and consulting | 0.25 | 0.06 | 0.07 | 0.06 | - | 0.06 |
| License Managed Campus-wide software applications | 0.20 | - | 0.15 | 0.05 | - | - |
| Classroom/lab support - over 90 technologyclassrooms/labs | 1.20 | 0.25 | 0.95 | - | - | - |
| Computer Lab setup and support | 3.20 | 0.10 | 2.90 | 0.20 | - | - |
| Totals: | 22.09 | 2.94 | 10.43 | 3.42 | 3.31 | 1.99 |