

# IT Strategy for Students Advisory Committee

## Report to the Executive Sponsors

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## **Charge and Introduction**

Several factors make it timely for the University of Washington (UW) to engage in a planning effort aimed at improving convenient access to effective technology resources in support of teaching and learning at the (UW). As a result of recommendations to President Emmert from the UW Information Technology Working Group, action teams have reviewed services provided by UW Information Technology (UW-IT) and made service priority and delivery recommendations that point to the need for a more clearly defined student information technology (IT) strategy. In addition, and on an ongoing basis, the UW will need continuing guidance on student IT strategy given the evolving needs of the UW community and of the ever changing nature of technology. Further, these difficult financial times require us to continually look for ways to support and enhance student academic success that are cost effective and improve efficiencies.

Toward this end, the IT Strategy for Students Advisory Committee, comprised of students, staff, and faculty representatives from across the University, was formed in February 2010. The goal of the Advisory Committee was to develop and recommend a student IT strategy to the project's Executive Sponsors in order to ensure the UW continues to provide technology that supports and enriches the academic success of all students in ways that are effective, efficient, and financially responsible.

The following report aims to provide insight into the ways students use (or would like to use) all forms of networked technologies to support their learning and research activities; summarize the IT services currently offered to students across UW Seattle campus; and identify current gaps or inefficiencies in IT services and recommend next steps to address these issues.

## **Process**

The Advisory Committee met monthly between February and June 2010. We focused on three areas of work:

- 1) Development of an inventory of current IT services aimed at students on UW Seattle campus.
- 2) Review and validation of research on students IT needs (Appendices 1 and 2).
- 3) Synthesizing results of these investigations into a set of aspirational scenarios, problem statements, and recommendations. (Appendix 3)

## Problem Statement

The lack of dedicated funds and strategic approach to upgrading all classrooms in order to provide the learning spaces necessary for the students of the 21<sup>st</sup> century is a problem. There is a need for a reliable resource stream to upgrade classroom technology beyond the basic maintenance in order to address the need for enhancements and innovations. There are currently no mandates (or funding) for adhering to the set of minimum classroom technology equipment guidelines. Classroom IT support and infrastructure need to be brought up to a standard level.

UW-Seattle students have the luxury of a broad set of IT services made available through the decentralization of computing and technology support, and the diversity of options provided by departments. However this very diversity and decentralization has also resulted in missed opportunities for intra-institutional efficacy, in particular the loss of efficiencies and economies of scale. There is often duplication of effort and additional costs associated when non-coordinated efforts occur. For example, there is a proliferation of small computing labs within departments and diverse adoption of course management systems (Moodle, Blackboard, and Catalyst). There is a need for a centrally-driven vision and direction to guide decisions for the best academic support resource and learning space allocation for students. The rapid rate of improvements in the delivery of technology, the fluidity of opportunities, and the continually changing pedagogy on campus requires a constant review of our assumptions about how we assess and deliver the best technology support to students.

Beyond the scope of technology, but a critically important and unavoidable problem to address is the inconsistent information available about courses through the course catalog, and other critical sources of course information for students. The online course catalog is often out of date. Some course descriptions have not been updated in over a decade. As such, students register for classes unprepared for the course requirements, i.e., prerequisite courses, specific technology skills, etc. The catalog description may not be consistent from department to department or from course to course. The students would like to see consistent online course content, including up-to-date course descriptions, course requirements, course series details, and a preview of what students will be doing in the course. Students want to know what they are expected to know or what skills they are expected to have before they enroll in a course, in addition to having access to an online course syllabus once they are enrolled. A uniform way to access course syllabi is currently limited due to decentralized hosting of the class websites. A goal for the future is to remove as many barriers as possible for students in accessing accurate and up-to-date information. This committee supports the students desire to have an institutional standard for integrated access, and up-to-date description of courses and syllabi.

While there has been good progress in providing wireless internet access throughout the campus, more work is needed to expand universal coverage and bandwidth. With the increase in use of laptops on campus, we need to increase the availability of power for laptop and mobile device charging.

Finally, uneven technology support and training for students and instructional faculty results in a wide variation in effective use of technology for instruction and course management. Technical support services must be made more timely and appropriate to the needs of students (for their courses) and instructional faculty (for course management).

### Summary of Student IT Services Inventory

To learn more about the numerous IT services at the UW, the Advisory Committee members, representing many academic and administrative units from across UW Seattle, collected preliminary baseline information on over 160 current IT resources, learning spaces and services designed to serve students. It was a daunting, but informative task (which is probably why a list does not already exist). While it is not meant to be comprehensive or complete, the inventory is indicative of how pervasive information technology is at the UW, and how the provision of IT is a shared responsibility. Dedicated learning spaces for technology represent the majority of resources listed in the inventory followed by administrative web services, online tools/applications, infrastructure, support and training.

Two very striking themes emerge from the inventory. First is the tremendous fabric of partnerships and collaboration that currently exists between student government, colleges and schools, departments, Classroom Support Services, University Libraries, University Registrar, and UW -IT in the funding and delivering of IT services and resources for students. Second is the absence of coordination between individual schools and colleges, or between schools/colleges and administrative units in delivering IT services to students, i.e., outdated course descriptions and multiple disparate learning management systems.

The complete inventory is available online at:

<http://spreadsheets.google.com/ccc?key=0Av0khEGNtzD9dEdneDZ6TmJU2NF0TNVbzRreGVXdHc&hl=en&authkey=CLTb6asL#gid=0>

Our inventory revealed many of the available learning tools, software applications, article and research databases, digital collections, and technology training opportunities offered to students are selected, developed, and maintained collaboratively with direct input from students and faculty from across the university. From personalized tools such as MyUW, DARS (Degree Audit Reporting System), MyGrad, the GPA Calculator, advising podcasts, and other student personal services, students have access to various tools to help them make decisions, organize their schedules and keep track of their academic progress and payments. Catalyst web tools, developed by UW-IT and available to all members of the UW community, are built based on direct user feedback, user research, and findings from usability studies. Classroom Support Services provides an extensive laptop and digital camera loan program for students and has expanded the capability of course casting to more classes each quarter.

Across campus there are literally hundreds of learning spaces (such as computers labs and libraries) operated by UW-IT, UW Libraries, and various schools and colleges. Most of the technology provided within these spaces is funded through grants awarded by the Student Technology Fee Committee while furniture, ongoing maintenance, and development are provided by the individual units. The Student Technology Fee funds approximately \$4.5 million per year in technology projects designed to directly address the needs of students.

The UW Libraries spends over \$8 million annually in developing online research database collections and tools, electronic course reserves, streaming media, 24/7 chat Q&A service, and online access to requests for delivery of collections from around the world.

UW-IT provides students with the essential technical infrastructure required to support and enrich the academic success of all students. This robust technology infrastructure includes an expansive wired and wireless network access; file storage, web publishing, programming and scripting support, database server access, and authentication and access control. Although UW-IT does not track costs of services across specific university populations such as students or staff, approximately \$12.4M of current UW-IT expenditures can be attributed to supporting students as part of the recent technology recharge fee calculations.

While this committee did not attempt to estimate the contribution provided by the schools and colleges we wish to recognize a significant effort is put forth there as well.

#### Research on student's needs

We requested a review of current research on student needs from researchers in UW-IT Learning & Scholarly Technologies. They provided a two-page summary (Appendix 1) based on a collection of recent research studies on student's needs and preference. We then validated these findings with several student groups around campus including the library student advisory committee, the library graduate student advisory committee, ASUW, GPSS, Student Technology Fee Committee members, and UW IT technology services Help Desk student staff. Our validation included conversations with approximately fifty students in focus groups of 2-4 students. Another 36 students responded to a simple Catalyst WebQ where they agreed or disagreed with the findings (Appendix 2).

## Aspirational Scenarios

The 3- to 5-year aspirational scenarios shown below envision a ubiquitously networked, digital technology environment for students. See Appendix 3 for complete details including a prioritized list of needs and recommendations.

### Areas of Focus:

1. **Strategic Planning and Budgeting:**  
The UW must provide planning, organizational and budgetary structures to ensure technologies to support student academic experience are ubiquitous, innovative, coordinated, and sustainable.
  - Ongoing fiscal and strategic planning to produce university-wide IT vision and priorities for students.
  - A new structure to support ongoing fiscal and strategic planning (to replace the Interim U-TAC).
2. **Consistent set of Integrated Services and Resources for Students:**  
The UW should provide students time- and place-independent access to informational resources, supported software applications and tools.
3. **Well-designed and supported infrastructure to enhance student innovation and discovery:**  
UW students merit a higher education experience that encourages and supports intellectual curiosity, creativity, and experimentation. Such an experience calls for:
  - Learning spaces, both formal (classrooms) and informal (libraries, departmental labs, studios, cafes, etc.);
  - High quality and up-to-date learning space equipment (data projectors, microphones, document cameras, computers, etc.);
  - A robust and pervasive IT infrastructure; and
  - Knowledgeable, adept and well-supported instructional faculty and support staff.
4. **Support and Training:**  
All involved in the teaching, learning and discovery mission of UW – students, faculty, and staff – must be supported in their use of technology for courses and student programs. Technical support services must be timely and appropriate to the needs of the community.

### **Gap Analysis and Challenges**

Our review of the current research on student IT needs against the current set of IT services being offered to students on the UW-Seattle campus revealed several missing pieces and key challenges that need to be addressed. While the aspirational scenarios provide details for improving current services and developing new services, we want to draw special attention to three priority issues that seem to be frequently overlooked:

- A simple yet transformative infrastructure improvement would be to enhance the capacity level coverage of wireless Internet across campuses and affiliated spaces and

increase the number of power outlets in formal and informal learning spaces around campus.

- Several schools across campus are hosting their own Moodle and Blackboard services rather than use the UW IT supported course management system, Catalyst – resulting in a more fractured and inconsistent course information environment for our students. [The STFC recommends an examination as to why units choose different tools, an assessment of the unnecessary costs associated with these choices, and selection of a single solution. They did not express a preference as to which tool.]
- Strategically plan and budget for upgrades to general use classrooms. A balanced approach of institutional versus student provided hardware and software will be a significant step towards providing students a sustainable learning environment for the 21<sup>st</sup> century.
- Harness the potential for collaboration and partnership between central units (UW-IT, UW Libraries, and Classroom support services, etc.) and school and colleges to illuminate and leverage centers of excellence.

### **Moving Forward – A Phase II Approach**

This report takes the important first step of providing a vision for success in delivering effective IT services to students at the University of Washington. In order to move from a vision to implementation, we recommend the formation of a standing Student IT Strategy steering committee comprised of a sub-set of STFC members, faculty, UW-IT and college level IT support staff. This committee should have authority to take action on the Priority 1-2 issues (as outlined in Appendix 3 of the report) during the first year, reconfirming and redefining the remaining priorities. Subsequent committees can address lower priority issues and evolve the strategy as the technology landscape changes.

### **Conclusion**

The recommendations in this report will serve as a powerful demonstration of the UW's commitment to provide technology that supports and enriches the academic success of all students in ways that are effective, efficient, and financially responsible. Our challenge is to enhance student academic success through collaboration and coordination across all campus units. The student need for effective technologies to support teaching and learning is paramount to a first class education at the UW.

Thank you for the opportunity to participate in this programmatic and functional review of the student IT experience. We look forward to the next steps in this process with the launch of a Phase 2 committee to address the top priorities in order to move forward.



# Appendix 1

## Summary of Relevant Data Regarding Student Needs and Trends in Technology Use IT Student Strategy Committee (April 23, 2010)

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This information sheet summarizes the data we have collected on student needs at the University of Washington (UW) over the last few years. The data are ample and derive from several large-scale, comprehensive investigations of the UW student population. Many of the findings and recommendations from these studies have not yet been addressed systematically by the UW, so we offer them here as a point of reference for your efforts to establish an IT strategy for students. We also summarize a few key findings from multi-institutional projects, such as the student technology surveys conducted by the EDUCAUSE Center for Applied Research and the annual *Horizon Report* produced by the New Media Consortium, which bolster our findings and provide additional evidence of student technology needs.

- *The Horizon Report*, 2010 (<http://www.nmc.org/pdf/2010-Horizon-Report.pdf>)
- The ECAR Study of Undergraduate Students and Information Technology, 2009 (<http://net.educause.edu/ir/library/pdf/ers0906/rs/ERS0906w.pdf>)
- Designing Campus Learning Spaces: A Report on Students' Current and Future Needs (2010) ([http://www.uw.edu/lst/research\\_development/papers/2010/Designing\\_Campus\\_Learning\\_Spaces](http://www.uw.edu/lst/research_development/papers/2010/Designing_Campus_Learning_Spaces))
- 2008 Surveys on Learning and Scholarly Technologies: Final Report ([http://www.uw.edu/lst/research\\_development/research\\_projects/LSTsurvey](http://www.uw.edu/lst/research_development/research_projects/LSTsurvey))
- Educational Technology at the University of Washington: Report on the 2005 Instructor and Student Surveys ([http://www.uw.edu/lst/research\\_development/papers/2006/edtech\\_2005report](http://www.uw.edu/lst/research_development/papers/2006/edtech_2005report))
- National Coalition on Electronic Portfolio Research, 2005-2008 ([http://www.uw.edu/lst/research\\_development/papers/2006-eportfolio-report](http://www.uw.edu/lst/research_development/papers/2006-eportfolio-report))
- Needs assessments conducted for Catalyst Tools development

## KEY TRENDS

**Mobile Technologies:** *The Horizon Report* includes mobile computing among technologies on the near-term adoption, collaboration, and communication horizon, meaning that they anticipate academic use at many institutions to become more widespread over the next year. Almost all students carry some form of mobile device, and these offer new opportunities for communication and collaboration in service of learning, particularly through an increasing range of mobile applications and ever-expanding cellular network. On the 2009 ECAR student survey, 44% of UW respondents indicated that within the next three years they anticipated using their cell phone or handheld device to do many of the things they currently do on their laptops.

**Laptop Use on Campus:** In our learning spaces research, students emphasized the need to use personal laptops for study, but indicated that laptop use was made more difficult by several impediments. Students felt that laptops were too heavy to be considered truly mobile devices. Students also needed specific types of infrastructure to make laptop use practical. Students desired access to electrical outlets and Ethernet ports, for example, to facilitate frequent recharging required to run their laptops and access to online study materials. They felt further that wireless coverage was spotty across campus and should be improved. Students also desired improved access to printing stations, especially the ability to print from their own laptops rather than through campus computers.

**Classroom Technology:** Inconsistent and inadequate classroom technologies are another source of frustration for students. In survey responses and focus groups, students often conflated inadequate technologies in classrooms and instructor competence, believing that lack of facilities indicated a lack of preparedness on instructors' parts. They felt that consistent availability of technological resources would improve both their own learning and instructors' ability to convey information. This was a key finding from our 2005 technology surveys; since then we have not conducted research directly on this topic, but students continue to voice frustrations about classroom technology during interviews and focus groups.

**Flexible, Accessible Learning:** Students want to be able to learn and work where and when they desire. Students are increasingly mobile and want to balance demands among work, home, and school efficiently. They want easy and efficient access to information and to their social networks to support "just-in-time" learning, through a range of devices. In our learning spaces research, we found that in order to accommodate their schedules, students need flexible, distributed learning spaces, accessible at any time of day, near cafés and other eateries. These spaces should support use of students' laptops and mobile devices.

**Applied Learning and Collaboration:** In 2007, the AACU recommended that students use emerging technologies for "research, experimentation, problem-based learning, and creative work," especially in their majors. *The Horizon Report* notes that today's students need skills in critical inquiry and flexible thinking; they need to be connected to broad social issues through civic engagement; and they need support in applying their learning to solve large-scale complex problems. To meet these needs in part, teaching and learning practices have become more

interdisciplinary, collaborative, and field-based; students are learning through experience and applying their skills in a wide variety of applied research and service projects. Collaborative technologies—many available free of charge—play an important role in connecting members of a learning community that extends far beyond the traditional classroom. Our 2005 and 2008 surveys showed high levels of student interest in collaborative technologies.

**Online Access to Course Materials:** Our surveys, focus groups, and needs assessment interviews all reveal that students want more course information consistently available online. This need begins when students register for courses. They want up-to-date information about courses of interest, including a course description, requirements, prerequisites, and a list of technologies that will be used. They also expect all courses to have a regularly updated Web site with assignments, readings (including electronic course reserves), lecture slides and/or podcasts, and all other course materials assembled in one place. For most students, the technology used to present such information (CommonView, Learning Management Systems, or other Web tools) matters less than that information is available and accessible. *The Horizon Report* also points to eBooks as a technology that is likely to see significant adoption over the next two to three years. As use of these resources grows students will want to be able to access them via course Web sites.

**Web 2.0 Technologies:** In our 2008 surveys we found that even though many technologies are available to faculty, most UW faculty currently use only a small number of these on a regular basis to support their teaching. Commonly used are email, web pages, word processing software and presentation software. Less often used are those technologies that would involve students in content creation and collaborative activities (so-called “Web 2.0” technologies). The most seldom used technologies include social networks, podcasts, blogs and wikis. Online discussion boards, file sharing, library databases and indexes are used more often, but their use by faculty is inconsistent.

**Digital Literacy:** *The Horizon Report* notes that, despite agreement on its importance, little attention has been paid to educating students in digital literacy skills. As technologies evolve, digital literacy must focus less on tools or particular platforms and more on ways of thinking, seeing, and crafting narratives and arguments through a range of media. The importance of improving students’ digital literacy was also a finding in our ePortfolio research studies.

## Appendix 2

### Question 1.

Does this list cover all of your IT needs for academic success? If not, please add what is missing and indicate any other trend or theme that is important to you.



### Question 2.

Please indicate three trends that are most important to you.

- Mobile technologies
- Laptop use on campus
- Classroom technology
- Flexible, accessible learning
- Applied learning and collaboration
- Online access to course materials
- Web 2.0 technologies

### Question 3.

What would you like to accomplish with your mobile device to enrich your academic success?



### Question 4.

Any other thoughts or comments you would like to contribute?



# Appendix 3

## Aspirational scenarios

These 3- to 5-year aspirational scenarios envision a ubiquitously networked, digital technology environment for students. The adjectives describing the optimal student IT environment are: dynamic, easy, expandable, fast, forward & backward compatible, innovative, nimble, open, reliable, responsive, robust, secure, simple, uniform and user-centric.

### 1. Strategic Planning and Budgeting:

The UW must provide planning, organizational and budgetary structures to ensure technologies to support student academic experience are ubiquitous, innovative, coordinated, and sustainable.

- Ongoing fiscal and strategic planning to produce university-wide IT vision and priorities for students.
- A new structure to support ongoing fiscal and strategic planning (to replace the Interim U-TAC)

Need	Recommendation
<b>Priority 1.1:</b> Need to develop a three year student IT strategic plan that is in line with the campus IT strategic plan.	<ul style="list-style-type: none"><li>- Create an ongoing Student IT Strategy Committee comprised of a sub-set of STFC members, faculty, UW-IT and college level IT support staff.</li><li>- Committee will recommend a campus student IT strategy consistent with the campus IT strategy</li><li>- Strategy will provide a framework for the STFC to use for proposal requests and funding.</li><li>- Committee membership should be for 1-2 year lengths allowing for turnover of no more than one-half the committee each year.</li><li>- Annual renewal and assessment of goals and priorities in strategic plan.</li></ul>
<b>Priority 1.2:</b> Need to establish a budget structure and coordination for IT in formal and informal learning	<ul style="list-style-type: none"><li>- Plan for consistent technology upgrades in all campus learning spaces. See 3.3</li><li>- Provide faculty support and/or training on classroom technology.</li><li>- UW-wide expenditures should be coordinated to avoid redundancy or increased</li></ul>

spaces.	cost.
<b>Priority 1.3:</b> Need to ensure ongoing student involvement in defining needs and the planning process.	– Make sure that permanent IT planning bodies have student membership, survey and assess student needs.
<b>Priority 1.4:</b> Need to create formal coordination between UW-IT and school/college IT units.	– Create an IT governance structure with appropriate decision making authority. This should include school and college computing directors. – Incentivize collaboration by providing central grants (with permanent funding) for projects that involve central and school/college units working together.
<b>Priority 1.5:</b> Need to develop more effective oversight of compliance with regulations	– Ensure that data custodians and Data Management Committee are aware of regulatory and compliance issues with sufficient time for resolution.
<b>Priority 1.6:</b> Need a campus-wide focus on security and student data privacy	– Restore and sustain funding for UW-IT resources focused on security and privacy. Provide education and resources for school/college IT.

## 2. Consistent set of Integrated Services and Resources for Students:

The UW should provide students time- and place-independent access to informational resources, supported software applications and tools.

<b>Need</b>	<b>Recommendation</b>
<b>Priority 2.1:</b> Need consistency in standards for course management systems that enable UW to deliver integrated, complete, and accurate course information to students through the enterprise portal. Course information includes syllabus, assignment submission, progress reporting, and instructor communications.	– Establish a working group to define the minimum requirements for UW course management systems (CMS) and consider whether the UW should encourage units to adopt a single, institutionally-supported CMS.  Note: A user-centered design approach should be used in the development or acquisition of software applications.

<p><b>Priority 2.2:</b> Need to provide monitoring and near/long term feedback to students about their courses and programs.</p>	<p>Continue to invest in web-based Student Personal Services to provide more personalized support for academic planning, consistent with the goals of the concierge functionality that is defined in the Quali Student system. Need for a DARS-like service for graduate students with the ability to track academic progress online. Attention should be paid to making services available as mobile applications for a variety of devices. Note: A user-centered design approach should be used in the development or acquisition of software applications.</p>
<p><b>Priority 2.3</b> Need adequate support for student use of equipment and software. Specifically, the software applications that students are required to use in their classes should be supported by the University.</p>	<ul style="list-style-type: none"> <li>- Establish a working group to conduct an assessment of current services that support student use of equipment and software and recommend improvements.</li> <li>- Work with the Graduate School and other appropriate groups to finalize the ability to submit theses and dissertations electronically.</li> </ul>
<p><b>Priority 2.4:</b> Need for student access to collaboration tools using text, audio, and video.</p>	<ul style="list-style-type: none"> <li>- Fully utilize current collaboration tools (Google Apps and Live@Edu) and improve interoperability of these platforms with Catalyst and other course management software. (See priority 2.1 on CMS).</li> </ul>
<p><b>Priority 2.5:</b> Need a rich and well-supported array of information resources, productivity tools, and databases that support students' academic success.</p>	<ul style="list-style-type: none"> <li>- Increase funding for the libraries to provide an enriched set of online tools and databases for enhanced learning, research, and discovery by students.</li> </ul>

<p><b>Priority 2.6:</b> Need for students to be able to use software applications that work seamlessly with each other where appropriate.</p>	<ul style="list-style-type: none"> <li>- Require interoperability, e.g., a service layer, for any software acquisition or development.</li> </ul> <p>Provide sustained resources for Service Oriented Architecture (SOA) and identity management efforts in UW-IT and unit-level IT.</p>

3. Well-designed and supported infrastructure to enhance student innovation and discovery.

UW students merit a higher education experience that encourages and supports intellectual curiosity, creativity, and experimentation. Such an experience calls for:

- Learning spaces, both formal (classrooms) and informal (libraries, departmental labs, studios, cafes, etc.);
- High quality and up-to-date learning space equipment (data projectors, microphones, document cameras, computers, etc.);
- A robust and pervasive IT infrastructure; and
- Knowledgeable, adept and well-supported instructional faculty and support staff.

Need	Recommendation
<p><b>Priority 3.1:</b> Complete capacity-level coverage of wireless internet across campuses and affiliated spaces.</p>	<ul style="list-style-type: none"> <li>- Fund a new wireless initiative to complete the installation and upgrade of campus wireless access to all classrooms and high priority informal learning spaces. Add additional, accessible power outlets to classrooms and informal learning spaces as well as waiting spaces such as cafes, lounges, corridors/hallways.</li> <li>- Install laptop charging stations in every building with high volume of students.</li> </ul>
<p><b>Priority 3.2:</b> Establish consistent funding for educational equipment purchases for the continuing upgrade of general use classrooms, departmental labs and</p>	<ul style="list-style-type: none"> <li>- Strategically plan and budget for upgrades to general use classrooms. Strategically plan for a balanced approach of institutional vs student provided hardware and software. Create student study spaces that allow for easy transition from individual to group study and/or production.</li> </ul>



<p>studios and other informal learning spaces.</p>	<ul style="list-style-type: none"> <li>- Equip study spaces to support a wide variety of activities: group and individual study, file sharing and collaboration, videoconference, etc.</li> <li>- Provide needed capital and operation funding to allow for the expansion of audio (“podcasting”) and video (“coursecasting”) recordings in general use classrooms.</li> <li>- Provide needed capital and operational funding to expand low-cost IP based, in-classroom videoconferencing capability (up from the current 6 general use classrooms).</li> </ul>
<p><b>Priority 3.3:</b> Create new, innovated learning spaces to allow student creativity and experimentation.</p>	<ul style="list-style-type: none"> <li>- Establish a planning group to make recommendations on addressing this issue.</li> <li>- Consider the recommendations found in the March 2010 OUGL Visioning Report.</li> <li>- Establish a planning group to make recommendations on the optimal future use of existing campus student computer labs and other departmental/School/College specific spaces as a way to create new innovative learning spaces for students.</li> </ul>
<p><b>Priority 3.4:</b> Explore the use of personal technologies to enrich the learning environment at the University of Washington.</p>	<ul style="list-style-type: none"> <li>- Develop a plan in line with 2y2d that provides for students technology needs and balances support for UW provided services and support for students own technologies.</li> <li>- Increase software licensing options for students own device.</li> <li>- Explore standardization of student response systems (“clickers”) and use of students’ personal smart phones in lieu of purchased devices.</li> </ul>
<p><b>Priority 3.5:</b> Invest in on-going University-wide infrastructure upgrades and improvements for growing central administrative data storage at competitive/market-place costs; upgrade older and obsolete building switches and improve bandwidth for increased podcasting and course casting.</p>	<ul style="list-style-type: none"> <li>- Identify funding; e.g., a “teaching/learning” tax via ABB.</li> <li>- Develop a strategy for future decentralized storage needs.</li> </ul>

#### 4. Support and Training

All involved in the teaching, learning and discovery mission of UW - students, faculty, and staff - must be supported in their use of technology for courses and student programs. Technical support services must be timely and appropriate to the needs of the community.

Need	Recommendation
<p><b>Priority 4.1:</b> Need to develop just-in-time delivery of technical support for students and instructors and their courses.</p>	<ul style="list-style-type: none"> <li>- A unified help ticketing or triage system should be created so all instructors receive consistent support and have a single point of contact for support.</li> <li>- Provide technical support via live chat, similar to the “Ask a Librarian” service offered by the UW Libraries. [LST is implementing this service in AY2010-11, funded by STF].</li> </ul>
<p><b>Priority 4.2:</b> Need to provide face-to-face expert support and access to learning materials (handouts, slides, demos, workshops, classes).</p>	<ul style="list-style-type: none"> <li>- Continue to offer free workshops for students and faculty around certain technology topics in high demand.</li> <li>- Expand models of peer-to-peer support such as the “Computer Vet” for drop-in assistance with laptops.</li> <li>- Develop a library of short targeted videos that provide “how to” instruction on a wide variety of topics and software applications. The library of videos should be well-indexed, easily searchable, and accessible. A central location could serve as a clearinghouse for centrally or departmentally produced videos. Center for the Advancement of Learning and Teaching (CALT) or University Libraries could serve as the repository for the online or DVD productions.</li> <li>- Encourage the establishment of user groups around particular teaching and technology topics.</li> <li>- Provide a mechanism to easily share training materials across the campus.</li> </ul>

<p><b>Priority 4.3:</b> Need to improve communication about availability of support services.</p>	<ul style="list-style-type: none"><li>- Centrally publicize hours of service and options for obtaining help and expand publicity about training opportunities and workshops.</li><li>- Expand and publicize the model of the Best Practices for the Academic Continuity Tool Kit to provide a baseline for faculty in the use of technology for instruction: <a href="http://www.washington.edu/itconnect/emergency/act/">http://www.washington.edu/itconnect/emergency/act/</a></li></ul>
<p><b>Priority 4.4:</b> Consistent and equal support should be provided for all UW instructors in need of assistance with instructional technology.</p>	<ul style="list-style-type: none"><li>- Continue efforts to establish and grow the Center for Advancement in Learning and Teaching (CALT) to provide leadership, assistance, and training to the teaching &amp; learning community to advance student learning through the use of IT technologies.</li><li>- Provide a convenient baseline or checklist of services that faculty can select for assistance.</li></ul>

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