#### INFORMATION TECHNOLOGY COMMITTEE ANNUAL REPORT FOR 2008-2009

#### I. Statement of Committee Functions and Charge

Faculty Policies and Procedures 6.42. Information Technology Committee:

- A. MEMBERSHIP. The Information Technology Committee shall consist of the following members:
  - 1. Eight faculty members, two from each faculty division, appointed for terms of four years.
  - 2. Three academic staff members. No member of the Division of Information Technology staff may serve as a voting member of the committee.
  - 3. Three students, at least one of whom shall be an undergraduate student and at least one a graduate student, to serve one-year terms.
  - 4. Chief Information Officer, ex officio nonvoting.
  - 5. One nonvoting member representing the director of the University General Library System, two nonvoting members representing the vice chancellor for administration, and two nonvoting members representing the provost. These members shall be appointed by the provost.

B. FUNCTIONS. The Information Technology Committee is the faculty advisory body for policy and planning for information technology [IT] throughout the university. In performing its functions, it shall consult with such groups and individuals as it feels may be able to provide valuable advice. It may request such reports on budgets, personnel policies, and other topics as are necessary for it to make informed judgments and recommendations. It shall establish such subcommittees as are necessary to carry out its functions.

- 1. Reviews and makes recommendations on strategic planning for the university's information technology resources.
- 2. Reviews the performance of information technology facilities and services in supporting and assisting scholarly activities.
- 3. Receives reports from and provides general direction to committees formed to address specific information technology issues.
- 4. Monitors technical developments.
- 5. Consults with and advises appropriate administrative officers on budget and resource allocation matters including charges and funding sources for information technology services.
- 6. Receives recommendations from departments, deans, and the Division of Information Technology regarding the establishment, abolition or merger of information technology services and facilities supported by university funds, and makes recommendations regarding these actions to the appropriate administrative officers.

#### **II. Past Year's Activities**

The Information Technology Committee (ITC) held eight monthly meetings between September 2008 and May 2009 (the December 2008 meeting was canceled due to weather). Meeting agendas were published online at itc.wisc.edu and distributed to several campus email lists. Meeting minutes were posted in draft form at the same site within a week of each meeting and were amended and approved at the subsequent meeting.

## A. Data Security

Concerns about data security centered on the persistent threat from phishing attacks, which trick users into divulging personal information online, often by mimicking trusted sources. Publicity campaigns continued, including one informing the campus that departments will not ask for personal identity information. Campus surveys have indicated that about 70% of respondents are aware of phishing attempts, but about 5% of those receiving phishing attempts fall victim to them.

In the fall of 2008, Chief Information Officer (CIO) Ron Kraemer approved an emergency change to the campus password policy to combat a rise in phishing attacks. Over a matter of weeks, 87 phishing attempts were reported, with 29 incidents of people giving up their passwords. In another event, phishing emails went to 5,300 WiscMail users, and 95 responded, with some divulging passwords. Campus policy now states that passwords cannot be reset to the old password.

A sub-group in the Madison Technology Advisory Group (MTAG) has developed a list of recommendations. The ITC affirmed that operating together is important for dealing with these threats. The ITC explored other approaches, including MTAG's clearinghouse recommendation, blocking web sites, and sanctions against victims of phishing attacks. The use of digital signatures was encouraged for formal communication.

## B. Data Encryption

An important strategy for securing data is encryption. The ITC discussed a project in Enrollment Management that piloted the use of encryption. Encryption would safeguard faculty computers and thumb drives that contain records for courses, personnel, letters of recommendation and other university business. Loss or theft of this information would be a serious problem.

After being vetted through a campus process, new policies on encryption and incident reporting were endorsed by the ITC at its May 2009 meeting. Members of the group expressed the need to discourage the storage of sensitive information on portable devices.

# C. Course Management Systems

The ITC monitored the growth in campus use of course management systems, including Learn@UW and Moodle, and followed ongoing developments in legal challenges surrounding Desire2Learn (D2L), the platform for Learn@UW. In spring semester of 2009, 16 of the 20 largest enrollment courses used Learn@UW. Several schools and colleges use Moodle, an open source product, either as their primary tool because of its language support and math/engineering symbols, or to supplement Learn@UW.

Campus interest in and use of Moodle is broad. For example, a Technology-Enhanced Learning Grant was awarded to support the use of Moodle in the College of Engineering to help add features in course management. There is no plan to migrate to Moodle from D2L, however. Moodle and Learn@UW offer different features and would not replace the other. A small study group is evaluating both to help those on campus decide which to use. Since UW-Madison supports (Utility) D2L for UW System, moving to Moodle would not save UW-Madison money.

A Moodle Council was established in summer of 2008, bringing together several colleges that use Moodle almost exclusively and others who see Moodle as an important part of their instructional technology. Their goal is to include Moodle in the campus portfolio of instructional applications. The council developed best practices guidelines for college- and school-level Moodle services and called for funding for Help Desk support of Moodle. Ron Kraemer noted that securing resources for this over the long term is problematic.

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Given Blackboard's early successes in a patent challenge to D2L, the ITC called for contingency planning and consideration of alternatives to D2L. DoIT's Academic Technology group and current users of Moodle on campus informed the ITC that Moodle could not be deployed for the entire campus under emergency conditions with one semester's notice and that services of an outside vendor such as MoodleRooms would be required. Initial planning for a transition, as identified by a planning group, began.

The ITC discussed extensively the issue of long-term retention of course materials made available through Learn@UW. A separate records-review group was formed, with representatives from the General Library System, School of Medicine and Public Health, Graduate School and others, to examine the campus' archival record procedures.

# D. Delivery of IT Services and Campus Infrastructure

Responding to a call from the Deans' IT Committee, the ITC commissioned an inventory of campus IT resources, including staff, space, hardware, licenses, and applications. The goal was to determine the highest payoff for collaboration across units, such as in software licensing and maintaining multiple data centers.

DoIT engaged a consultant for the inventory project, which was part of a pilot that included the College of Engineering, the College of Agricultural and Life Sciences and the School of Business. One goal was to create a process that could be replicated across campus to assess the campus investment in IT. The process would be the first of its kind. It could also help with determining life cycles of IT resources and deciding what to keep, what to replace, and how to dispose of services no longer needed.

During Inauguration Day on January 20, 2009, the campus network handled roughly double its normal traffic. That included the stream carried over Internet2's research and education network and more than 1,000 simultaneous on-campus viewers among all of the DATN (Digital Academic Television Network) news channels.

The committee monitored the electronic calendar and mail services on which the campus heavily relies. DoIT piloted the offer of free unlimited storage quota (up to 3 GB). A new WiscCal advisory group considered Oracle's modification of the product on which WiscCal is built. The campus will evaluate WiscCal and its use, with the possibility of including newer or other technologies.

An important issue facing the campus is the diminishing number of unassigned IP addresses. The supply will soon be gone, and no more will be available. A campus team formed in August 2008 to address IPv4 address allocations. An education campaign will be needed to explain the issue and what to expect.

The committee reviewed progress made on the Human Resources System project, a UW System-wide effort to replace the current personnel system. The current mainframe-based system is old, but functional. Given the experience of previous efforts to replace this system, the committee is concerned about the budget, scope, and timeline of HRS.

# E. Learning Spaces

An important focus for the year was fostering the creation of physical spaces and technology infrastructure to support enhanced teaching and learning. A high-visibility setting for such innovation is the new South Campus Union, now under construction. The group viewed plans and proposals for learning spaces in the new facility. Technology is to be transparent to the user in the public space, enabling people to work alone or in groups in informal learning spaces. Computer labs are still frequently used by students.

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In April 2009, a presentation by staff from the School of Education again explored the evolution of informal learning spaces. Making easy-to-use presentation technology readily available in classrooms (rather than having to move from room to room) is also a priority. Whiteboards will become the norm. Maintaining flexibility of classrooms is a key concept, as is facilitating the integration of curriculum with new learning spaces.

In May 2009, the committee voted unanimously to update the 1997 Plan for Application of Technology in Instructional Space standards for instructional technology in UW-Madison's general-assignment classrooms, with the goal of producing a standard for 2010. In particular, the ITC called for the formation of an instructional facilities standards committee.

## F. Collaborating with Campus Technology Groups

The ITC recognized the important contributions of campus technology groups to the effective delivery of IT services on campus. One such group is ComETS, the Community of Educational Technology Support, a grass-roots organization that fosters cross-campus collaboration, transparency, and information exchange. Its special-interest groups have been instrumental in the adoption and growth of such technologies as clickers and Drupal. The group also provided useful input to the teaching and learning section of the IT Strategic Plan. In early 2009, the ComETS listserve had more than 250 subscribers, mostly UW-Madison academic staff, but also faculty and others who support teaching and learning with technology in some way.

Another key partner is CTIG, the Campus Technical Issues Group. CTIG hosted an event on the campus' Identity Access Management efforts, an overview of DoIT services, and a campus forum on strategic IT planning.

The Madison Technology Advisory Group (MTAG) requested an initiative to evaluate calendar and email on campus. MTAG was to report to the ITC when that evaluation is complete.

A Deans' IT Committee was appointed by Chancellor Martin in 2008. The group has addressed such issues as campus infrastructure, IT investments, and IT resource allocation. CIO Ron Kraemer has met with the deans' group and is positive about its direction.

# G. Strategic Planning for IT

The ITC devoted considerable attention to the development of a strategic plan for IT. The planning process included numerous campus forums to collect information and feedback. Drafts were shared, and the plans of departments and such entities as the Wisconsin Institutes for Discovery and Morgridge Institute for Research were acknowledged and considered. The ITC's sentiment was for documenting where the campus sees itself now and how it expects to move forward. Planning will be ongoing over a number of years. When a framework is agreed to, specifics can emerge. Planning must also acknowledge the presence of a new chancellor (with her own strategic vision), reaccreditation, and the Administrative Process Redesign. Alignment with the Campus Plan will be important as the process moves forward.

The ITC suggested various themes and approaches for the plan. In February 2009, the committee discussed CIO Ron Kraemer's presentation on the plan. As one member said: "The next part will be hard, as we are being asked to change what we do and how we do it. ITC needs to be champions of what is going on . . . We know things have to change; it's about how we will do it, and then move forward."

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## H. Google Applications

Google applications, such as Gmail, Docs, Calendar, and Talk, are popular on campus, especially with students. The ITC explored the possibilities of using these apps more extensively. Important considerations include legal issues, the limitations of user agreements, the need to establish guidelines for employees, faculty and students, and the interoperability of Google apps with WiscCal, iCal, other calendaring services, and email. It is essential to define users' rights and the rights of Google as a provider. Security, indemnity and perpetual-use licenses are important.

Disclosure of Google docs, emails and documents to competitors or others would have serious implications. This is similar to concerns about FERPA and intellectual property. The campus needs to know that Google has addressed terms of service in a business setting. The campus, along with peer institutions, continued to examine these issues.

In January 2009, the ITC heard a presentation on the Google Book Search Project, a joint effort of UW-Madison Libraries and Google to prepare and digitize UW-Madison's book collections. UW's agreement with Google for digitization dates to October 2006, and Google is digitizing about 10,000 books a month at no cost. Despite concerns about commercializing the public domain and monopolizing information access, Google Library Partners, including UW-Madison, assert that benefits to access and research justify the agreement.

## I. Use of AdobeConnect for Instruction

Adobe's Connect product offers intriguing possibilities for use in administration and instruction. The committee learned more about the product and explored its applications. Connect's use in an introductory biology class was discussed. After a few weeks, 30 of the 80 students in the class were using Connect to chat with each other and to share information. Students were very enthusiastic about "virtual office hours" and Connect. When the instructor was not present, students helped each other. Connect has uses in the research community for document sharing, group collaboration, and video conferencing, with only a laptop or desktop computer needed.

The instructor who spoke to the ITC about use of AdobeConnect documented more than 20 email exchanges to get authorization to use licenses already owned by UW System and administered by UW-Extension for timetable classes. It was agreed that the process of using existing AdobeConnect licenses should be streamlined and that technical support should be offered.

# J. Budget and IT Project Priorities

In 2008-09, budget cuts continued, while demand for IT services increased. The committee heard reports from CIO Ron Kraemer on the situation. Staff furloughs amounted to the loss of 20 FTEs at DoIT, which required the prioritizing of staff effort. The campus core missions of teaching and learning, research, outreach and public service, and campus services must be protected. The campus must continue to explore cost savings through, for example, resource sharing. This affected strategic planning.

# K. Campus Planning

With the campus infrastructure continuing to expand and renew, the ITC worked to stay abreast of developments in the area of capital projects. An ITC member served as the group's representative on the Campus Planning Committee and updated the group regularly. The ITC discussed the provisioning for IT in new and renovated buildings. Concerns included the number of data jacks in new buildings, planning for technology in conference rooms, standardizing equipment in classrooms, and ensuring adequate IT support for research.

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#### L. Research Computing

The committee discussed the status of research computing on campus. There are different viewpoints: some assert that research computing facilities and programs are adequate now; others claim that we need to move beyond clusters in closets and establish some level of centralized support; and others want help with everything.

Wisconsin Institutes for Discovery and the Morgridge Institute for Research (WID/MIR) are doing their own planning, but they want to be partners. Discussions about complementary relationships are ongoing.

#### III & IV. Current Issues or Concerns and Summary/Recommendations

Data security continues, and will continue, to be a major liability for the university. Solutions are both technical and educational.

Core services offered centrally have evolved to encompass better email service that meets campus needs, negotiation for not-for-fee services offered from outside vendors, and engagement with users of course management systems not purchased by UW System nor previously supported by DoIT.

Instructional technology standards for general assignment classrooms are largely those formulated in 1997 and not been formally updated since. Various colleges and schools have negotiated higher specifications during construction and remodeling but campus-wide updated standards are required.

Strategic planning for IT, currently in progress, has engaged the campus widely and should look to align those IT resources and services offered by units and colleges/schools with those centrally available, striving for economies and improved service in the mission of the university.

#### V. Committee Membership

Voting: <u>Faculty</u> Phillip Barak (chair), Soil Science Susan Bernstein, English Ivy Corfis, Spanish and Portuguese Kristin Eschenfelder, Library and Information Studies Katrina Forest, Bacteriology Richard Halverson, Educational Leadership and Policy Analysis Mathew Jones, Physiology Jeffrey Linderoth, Industrial and Systems Engr

<u>Academic Staff</u> Eric Alborn, Business Sandra Paske, Memorial Library Brenda Spychalla, Education

<u>Students</u> Dan Cornelius, graduate Erik Paulson, graduate Stephen Pulec, undergraduate Non-voting: <u>Ex Officio</u> Ron Kraemer, CIO and Vice Provost for IT

<u>General Library System</u> Ken Frazier, Director

<u>Provost Appointments</u> Joanne Berg, Vice Provost for Enrollment Management and Registrar Clare Huhn, Office of the Provost Don Miner, Business Services

#### Liaisons

Lisa Jansen, L&S Learning Support Services, ComETS Rob Kohlhepp, Computer-Aided Engineering, CTIG representative Mike Pitterle, Pharmacy, ComETS