INFORMATION TECHNOLOGY COMMITTEE
ANNUAL REPORT FOR 2009-2010

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 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) met nine times between September 2009 and May 2010. 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 finalized at the subsequent meeting.

Issues monitored included:

(continued)

A. Strategic Planning for IT

The ITC continued to monitor the development of a Strategic Plan for IT, a major initiative from 2008-09. Drafting and editing the plan's charters involved about 300 people, with several thousand taking part in meetings and forums. Work included on building an interactive web space for ongoing strategic planning relative to UW-Madison's strategic plan (Madison Initiative).

In October, the committee heard detailed progress reports from the nine teams working on about 40 charters that will result in initiatives for later action.

B. Review of IT Leadership Structure in Major Campus Units

Over two meetings, the committee reviewed the IT leadership structure in campus schools and colleges: What is it? Where is it going? How is it fostered?

Office of Vice Chancellor for Administration – A group called AIMS (Administration Information Management Services) was formed in 2008 to provide shared IT services for administrative customers. The goal is to aggregate and consolidate existing departmentally provided IT services and staff for cost savings by sharing infrastructure and staff. With 28 staff, AIMS complements DoIT and leverages DoIT services whenever possible. No one is compelled to join, and customers/partners can be full or partial. Service level agreements can accommodate needs. Individual units can buy in at the level they need.

School of Business – The Technology Support Center (TSC) is similar to peer business schools, merging technology support of administrative, desktop, instructional and research functions. TSC has twelve staff. It pioneered WebSurvey, later adopted by DoIT, and Qualtrics Survey Tool, later adopted by UW System. The College of Engineering adapted a Moodle model developed by the business school. Event management software hosted at Grainger Hall is shared by Intercollegiate Athletics and the School of Education and could expand elsewhere.

College of Letters and Science –Learning Support Services (LSS) focuses on instructional technology to support teaching, learning and technology, college wide. Staff number about twelve, compared to 80-100 IT staff for all of L&S. Much time is spent in collaboration with ComETS, the Graduate School and other units on campus on topics such as Moodle, Lecture Capture, and Drupal. L&S is large and decentralized, with IT units scattered throughout supporting instruction and research. There is no staff person for global perspective at the dean's level. Discussion of an L&S CIO may evolve.

Graduate School – A CIO oversees the technology aspects of graduate education and research including reporting responsibilities. There is a need to scale services to the campus. DoIT should be included (barter and charge-back is now involved). A more formal relationship with the campus CIO would help to address decisions that have been made at the local level and vice versa. This is now a collegial arrangement, which could be formalized.

College of Engineering – CAE (Computer Aided Engineering) has 12-14 staff, 40 students and a budget for teaching labs. The focus is instructional in the College of Engineering, including licensing and deployment of engineering-specific tools and software. Services include web hosting and file storage, Moodle (known as eCOW2 in engineering), and software delivery. Success comes from talented staff, the ability to experiment, engaging customers successfully on needs, a faculty advisory committee, and a stable budget with few charge-back services. Challenges include taking advantage of and influencing leveraged services (governance being key), finding the right partnerships, and operational factors such as cross-discipline support for science and improved help desk services.

(continued)

Division of Information Technology – DoIT's total staff exceeds 700, or about 40% of IT staff on campus. It has a $75 million budget, less than 15% of it discretionary. Discretionary funds already include expenses for the portal, email, student technical training, etc. Major customers are UW System, state and regional entities through the network (WiscNet, Boreas, Northern Tier), which includes a 24/7 campus monitoring system at DoIT, and those relying on the DoIT Data Center.

Services include the Help Desk, the campus network (120,000 ports, wireless infrastructure, security and 10G backbone), software training, the portal, publishing and printing, voice service for state agencies, the Tech Store, campuswide tech support, application development, and general access labs including laptop checkout.

Challenges include:
- Relationships among centralized and decentralized IT and management across campus. Complement rather than compete. This is the emphasis for the strategic planning process.
- Who to call for help or services? Inquiries should go to the Help Desk.
- Services are too costly. Rates are set to fully recover costs associated with the services. HRS is an example of the complexity of how to share costs across all campuses.
- The wide disparity of IT across campus in terms of funding and services. How do we communicate with those not at IT meetings and giving input on IT decisions?
- Research support, as grant holders often see IT as automatic.
- Pilot and prototype capabilities at an enterprise level.

School of Education – IT support is provided by MERIT Services (Media, Library, Instructional Support, Classrooms, Infrastructure, Web) and the Wisconsin Center for Education Research (WCER). Governance is through ITPAC, SoE's Information Technology Policy Advisory Committee. The IT leadership in SoE has evolved over time. A CIO will be on board in summer of 2010.

WCER is one of the oldest, most productive education research centers in the world. The largest such center in the U.S, its budget is $35 million a year. Challenges include a lack of FTEs to support backup services. WCER and MERIT collaborate for many services.

The committee noted that all CIO presenters have a very collegial informal relationship with each other. While they do not formally meet as CIOs, they informally meet through CTIG, APR, ComETS, etc.

C. Mobile applications

Demand is growing for computing applications that work on mobile devices. Students especially access Gmail, Facebook, eBay, and other services on their mobile phones, and the campus needs to provide its own applications. A portfolio of such applications for mobile devices could include a campus map, news and events, bus routes, and course information. The committee explored this trend in at least two meetings and considered ways to encourage development of mobile apps.

Applications for mobile devices are being written on campus and around the nation. One, for users of iPhones and iPod Touches, provides Madison bus routes. Students will develop mobile applications with or without incentives, but a showcase, a contest, or availability of Kauffman Entrepreneurship grant funds might spur development. ComETs is reviewing mobile applications for the teaching and learning community. The committee discussed the role of UW staff in developing mobile apps, noting that no mechanism now exists for staff to use a portion of their work time on application development for mobiles.

(continued)

The university continued work on m.wisc.edu, a mobile-enabled service to accommodate users of mobile devices. This would offer an official UW-Madison presence on mobile devices, which would broaden to include UW services such as calendar, email, etc.

While mobile computing needs to span a range of technologies (iPads, WAP service, Android, iPod, Blackberry, etc.), the iPhone is the first focus. A new iPhone app for campus directory lookup, scheduled for release in August 2010, would serve as a model for building new campus mobile apps.

Campus development has been defined broadly to include rendering web pages to mobile devices in addition to building applications, with a primary focus on enrollment management, library, University Communications, alumni association, and the CIO office.

D. Research Computing

UW-Madison now provides high throughput computing and is developing its Research Computing Initiative to address the need for high performance computing. The committee learned that the Euclid Cluster now involves nearly 300 servers and is about ten times larger than what the campus has provided in the past. It provides access to specialized computing applications for campus researchers.

E. Planning for Continuity of Operations

The ITC explored the need for disaster planning in two contexts. One was planning for the possibility of disrupted campus operations in the event of a pandemic; the other was reviewing the impact on campus operations of a snow day that occurred in early December 2009.

The committee sifted through many technology options, both old and new, for coping with a pandemic. Members reviewed DoIT's Continuity of Operations Plans for maintaining services. DoIT prioritized its services for instruction and day-to-day operations, with academic instruction receiving highest priority. ITC discussion explored the campus' need for notifying departments and units and ensuring a communications component for campus.

Instruction issues included accommodating large numbers of absences of students, instructors, and staff and providing grades if a semester was shortened. Teaching central courses through social distancing (without face-to-face interaction) was considered. A flu.wisc.edu web site was set up to provide daily updates. Another site – TLE.wisc.edu – enabled faculty/staff interaction. Plans were posted, with advice on delivery of lectures in a pandemic situation.

The snow day in December 2009 tested the university's ability to deliver IT services. Demand for VPN (Virtual Private Network) service increased dramatically, and demand for online resources in general grew. Use of the "Ask a Librarian" chat feature spiked during the snow day. DoIT was able to monitor services remotely. Its Continuity of Operations Plan included delivering content on the wisc.edu site in text-only mode to accommodate the load. UW Police used WiscAlert to announce the resumption of classes. Multiple modes (Facebook, WiscMail, wisc.edu, etc.) were used to announce the closing. Some students were able to use Learn@UW to submit assignments. Some small classes met successfully using Adobe Connect.

One suggestion was to incorporate dry runs, similar to the snow-day experience, in future pandemic planning. The group's comments were forwarded to campus leadership for their use in planning.

(continued)

F. Digital Humanities Initiative

A multidepartment digital studies proposal, spearheaded by Jon McKenzie, was submitted to Round II of the Madison Initiative for Undergraduates and was awarded in May. New faculty lines, teaching assistantships, staff support, and facilities/equipment will be part of this initiative. UW does not now offer a comprehensive undergraduate curriculum in digital studies, and this proposal foresees the creation of an interdisciplinary certificate program.

The initiative is a network of 30-40 faculty and staff from libraries and DoIT to enhance the use of media and IT on campus with a goal of being a world leader in digital media. Combining the library's knowledge database with the media studio's production platform generates finished projects that are added to the database. Humanities is expected to be the primary user, though others might use the collaborative space.

The ITC served as a venue for presentations on the Digital Humanities and the HathiTrust (electronic curation of texts and scholarly access to Google Books). The ITC supports the increased use of research computing in the humanities generally.

G. Learning Spaces

A Learning Spaces Workgroup and a special interest group on learning spaces within the very active Community of Educational Technology Support (ComETS) reported their progress to the committee. They are exploring the use of such tools as clickers, smartboards, and interactive whiteboards. The boards provide resources and templates, web site support, a toolkit for building applications, and other tools. Material prepared on a board can be saved for presentation and saved in PDF form for students. Some smartboards can be used with little training.

To improve learning spaces, the UW has an ongoing program of physical upgrades in general classrooms. The schools of nursing, education, and human ecology are considering improvements. The Classroom Media Support unit is now understaffed. A seemingly logical solution would be to share the maintenance of computers at podiums with DoIT's InfoLabs unit (although these are also already highly leveraged) or other colleges.

H. Lecture Capture and Other Learning Tools

The ITC reviewed progress made on learning technologies such as lecture capture. The medical school's lecture capture service is expanding under a partnership with LSS, DoIT Academic Technology, and FP&M. This service is very popular with medical school students (a 30-minute lecture can be consumed in 20 minutes). From a beta-test installation at Van Hise Hall, the service will expand, as FP&M installs the relatively inexpensive gear in more classrooms. The software is open source and very flexible. The goal is to make it a self-service, easy-to-use resource. Transcription/captioning and FERPA issues are being worked on.

Lecture capture raises important issues. Students may come to expect that all campus lectures are being recorded. Questions may arise about the need to construct buildings or hire more faculty members if we can capture lectures. As faculty and students record more lectures, data storage becomes a growing concern.

Collaboration among FP&M, DoIT, and L&S is improving instructional technology in general at UW. The decision to open source the software is commendable – it reduces license costs, enables local customization, and makes software available to others.

(continued)

I. Security

The committee considered the need to acquire more security controls to protect data in the wake of the incident in the chemistry department. Some controls are clearly needed, and the university will incur those costs. But other costs could be avoided if unneeded data is simply deleted.

Many people unknowingly store personal information on their computers. To help them locate restricted data, the campus is offering Identity Finder (for Windows and Mac computers) free for download. Encryption software is also available for those who need to store sensitive data.

J. Library Planning

The committee learned more about ongoing efforts to restructure and repurpose library services, with the goals of reducing costs and improving the quality of service. A major focus is on providing group study and performance spaces (for practicing presentations). Electronic versions of print are invaluable, and technologies such as Google Books will be important for providing greater access to resources. The library hopes to make available by fall a next generation of MadCat. Called "Forward," this would be a resource discovery tool that allows a single search. As the user population becomes more comfortable reading on-screen, the need for printing will continue to diminish. The library is working with e-Readers such as Kindle. Mobile devices will play a major role for the future.

K. Deans' Retreat Review

Ron Kraemer shared the presentation delivered to the deans on November 11, 2009, and the committee later discussed a subsequent report to the Deans' Working Group on IT and Library Infrastructure. The November presentation focused on "the new normal" – the need to adapt to fewer resources and increased demand. Ron said he works closely with the provost and vice chancellor for administration, but budget challenges mean that leaders at all levels are interested in efficiencies. The general plan is to produce more degrees at UW-Madison without adding more buildings, which brings IT to the table. Senior campus leadership recognizes that IT will play a key role in extending new services and possibly reducing costs through efficiencies. To facilitate collaboration, we should look at the current funding model. We should examine, for example, data centers, which require redundant support. Issues such as governance and provisioning should be clarified.

The report to the Deans' Working Group was limited to teaching and learning. Face-to-face education is highly valued, but TEL (Technology Enhanced Learning) is being included for refunding to help us learn more about the role of technology in teaching and learning as we move forward. The focus is on doing things differently, given that new funding is not available.

L. Digital Repositories

Beginning in 2000, the library became interested in making historical documents widely available on the open Internet. This evolved into a very successful collaboration with Google to place books online. About two million local images are available today. The number of visitors to the collection has grown from about seven million in 2008-09 to seven million in the first six months of 2009-10. Wisconsin's contribution to Google Books is 3% – quite small in the big picture. Three FTEs now send and receive books for digitization.

The collection provides access to out-of-copyright books and previews of in-copyright material. The agreement enables us to license access to the entire digitized corpus for the entire UW System. Google is very cautious about copyright issues and is working with UW-Madison on an agreement for releasing documents.

(continued)

M. Course Guide

The ongoing effort to provide an online representation of a UW-Madison course to the campus and public, including information about syllabus, methods of testing, the instructor, etc., cleared a major hurdle when Course Guide was released as a tab on My UW-Madison. This was a major project, fundamentally addressing how we do things on campus. It evolved as the technology evolved, with new approaches to searching, adding content, providing video clips, etc. Course Guide combined the old timetable and the university catalog (publications) and linked it to the enrollment system.

The committee saw a Course Guide demonstration and offered suggestions for improving the system, such as making it easier for faculty to add information about textbooks.

N. Governance of Student IT Initiative Funds

Students help to support campus IT through a tuition surcharge, which generates $6-7 million a year that is divided among DoIT, the libraries and others. The campus is considering an initiative to handle this as one fund, rather than a dispersed pool of money. This includes discussion of the overall governance of student IT funds.

DoIT surveys students and holds focus groups to identify priorities for spending funds from the Student IT Initiative (SITI). The new governance proposal includes a campus advisory group that would provide input on the allocation and use of SITI funds. The Student Information Technology Initiative Advisory Committee (SITIAC) would be a chancellor-appointed ad hoc committee with formal faculty and student membership, a chair, and executive committee of administrators (e.g., dean of students, provost). This would lend more transparency to the use of funds and provide more governance and articulation as to how funds are used.

The ITC reviewed the proposed group's structure and responsibilities. Under the proposal, the committee will be asked to provide guidance (along with others) as to how the student IT funds will be appropriated.

O. Google Apps

Negotiations with Google continued, focusing on terms of service favorable to the UW, how click-through agreements work, and legal vulnerabilities to which the campus is exposed. Other concerns include who owns documents/material and the physical place where documents reside. Gmail and other Google apps are broadly used on campus, although our negotiations are thus far limited to Google Docs, Spreadsheet and Sites. Can the university stand behind "cloud applications" when people use them and agree to terms? Policy guidelines are in place.

Administrative Legal Services is working to ensure that research and intellectual property rights are protected. The campus will provide guidance to students and staff who now use Google apps for migrating to the campus Google. The integration with NetID and password is being worked on. Collaboration outside of the UW Google domain will be possible. Partnering across the world will be easier.

P. Campus IT Policy

The ITC reviewed UW-Madison's IT Policy Program, which describes what IT policies are and how they are formulated and revised. The major goal is to broaden inclusion and increase transparency in the policy area. A campuswide Policy Planning Team helps to develop policies, procedures and processes. Policy forums are held quarterly. The committee reviewed completed policy initiatives.

(continued)

Q. Technology Upgrades

The ITC received frequent updates on improvements to campus technology services. These included a new web version of WiscMail, Adobe Connect, Course Guide, Common Scholarship Application, iTunes U, eReimbursement, the Human Resources System project, MyWebSpace, and the revamped Data Center.

The committee discussed Digital Measures, a web-based outsourced application / cloud service hosted in Milwaukee for managing and reporting on teaching, research and service activities. The schools of business, education, nursing, human ecology, and veterinary medicine are using Digital Measures to some extent. It could store faculty data and information on publications and teaching loads. The University Committee seems comfortable with governance and data issues, and the service will be explored further. Due diligence is underway, and the ITC will stay informed.

The committee reviewed the local expansion of fiber networks. A federal grant is funding the Metropolitan Underground Fiber Network (MUFN), which will expand access to computer networks for underserved communities and local agencies. The city of Madison has also submitted an application to bring Google Fiber to the city.

III. Current Issues or Concerns

Focus has improved over the past few years on the role of instructional technology as fulfilling part of the university mission. The role of research computing is ripe for similar examination, not only high performance computing or high throughput computing, but the broader spectrum of research computing, including storage and common software tools.

IT leadership around the campus should continue to be nurtured. Not only is this not duplicative but it serves to link better campus users with central and aggregated IT services. Well-organized IT units have been the most agile and the most able to negotiate for services with DoIT and with each other. Major campus initiatives, including improved personal and network security, are likely to hinge on such local leadership.

In the search for efficiencies and cost-savings, care must be taken to ensure not to harm the innovative energy of the UW faculty, staff, and students. Greater transparency in budget decisions for IT would be welcomed. As an example, for three years, TEL funding provided a host of new courses and tools to the campus, as well as a number of focal points for collaborative interaction across colleges and schools; with the apparent sunsetting of TEL, some of the institutional support for diverse projects has been diminished.

As the 2009-2010 year opened, IT leadership on campus welcomed John Krogman as the chief operating officer of DoIT. As the academic year drew to a close, there were additional changes in campus level IT leadership. The director of DoIT's division of Academic Technology, Kathy Christoph, retired. UW-Madison's chief information officer, Ron Kraemer, accepted a similar title at Notre Dame University and resigned his post here. Both vacancies should be thoughtfully filled with an eye toward the future role of information technology across the joint missions of teaching, learning, and administration at UW-Madison.

(continued)

IV. Committee Membership

Faculty
Phil Barak (chair), Soil Science
Ivy Corfis, Spanish and Portuguese
Kristin Eschenfelder, Library and Information Studies
Katrina Forest, Bacteriology
Mathew Jones, Physiology
Jeffrey Linderoth, Industrial and Systems Engineering
Jon McKenzie, English
Yongming Zhou, Anthropology

Academic Staff
Eric Alborn, Business
Paul Oliphant, Computer Aided Engineering
Sandra Paske, Memorial Library

Students
Erik Paulson
Steve Pulec
Elliott Rezny

Non-Voting Members, ex officio
Ron Kraemer, CIO and Vice Provost for Information Technology

Provost Appointments
Joanne Berg, Enrollment Management/Registrar
Clare Huhn, Academic Planning and Analysis
Don Miner, Business Services
Tim Norris, Office of the Vice Chancellor for Administration
Ed Van Gemert, General Library System

Campus Liaisons
Lisa Jansen (LSS), ComETS
Rob Kohlhepp (CAE), CTIG
Richard Kunert (Biotechnology Center), NAG
Mike Pitterle (Pharmacy), ComETS

Others
Jeff Bohrer, DoIT-AT-LTDE
Bruno Browning, LSS, College of Letters and Science
Perry Brunelli, DoIT Network
Christopher Blaire Bundy, DoIT ATS
Judy Caruso, DoIT CIO's Office
Kathy Christoph, DoIT ATS
Cheryl Diermeyer, DoIT-AT-LTDE
Jack Duwe, DoIT Director's Office
Paul Gunther, College of Agricultural and Life Sciences
Billy Kardasz, School of Business
John Krogman, DoIT COO
Steve Krogull, DoIT ATS
Alan Ng, Division of Continuing Studies
Jeanette Phillips, ISIS Central, Division of Enrollment Management
Brian Rust, CIO/DoIT Communications
Eric Straavaldsen, SAA, College of Letters and Science
Catherine Stephens, MERIT, School of Education
Tom Wise, FP&M, Space Management Office

List of abbreviations:
- ATS Academic Technology Services
- CIO Chief Information Officer
- ComETS Community of Educational Technology Support
- CTIG Campus Technical Issues Group
- DoIT Division of Information Technology
- IT Information Technology
- ITC Information Technology Committee
- LTDE Learning Technology and Distance Education
- NAG Network Advisory Group
- TEL Technology-Enhanced Learning