INFORMATION TECHNOLOGY COMMITTEE ANNUAL REPORT FOR 2010-2011

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 eight times between September 2010 and May 2011. 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:

A. Research Computing

In 2010-11, the committee devoted considerable attention to assessing UW-Madison's support for research computing and discussing how to improve it. The group opened the year by inviting Miron Livny, professor of computer sciences, director of the UW-Madison Center for High Throughput Computing, and leader of the Condor project, who said that the status of UW-Madison's computing infrastructure will affect our ability to respond to future opportunities and the competitiveness of the campus. Research computing includes hardware, software, and people. Questions of leadership, approach, funding, and participation are critical.

For several years, DoIT has explored the role of central IT in meeting the computing needs of researchers. DoIT hopes to build its understanding of research computing challenges. The efficiency study might help to make that more clear.

The ITC heard presentations on research computing facilities on campus, including the Social Science Computing Cooperative, the Laboratory for Optical and Computational Instrumentation, and the Cooperative Institute for Meteorological Satellite Studies in the Space Science and Engineering Center.

The group heard a presentation on UW-Madison's research cyber-infrastructure. Terry Millar has been developing an IT inventory database of equipment only (not FTEs or network infrastructure). Efforts to plan for what the campus will need for research computing will be helped if we know what we have. To best protect our research interests, Terry called for assigning responsibility for research cyber-infrastructure to someone reporting to the vice chancellor for research. The group noted that if DoIT-purchased computers are used in research, they should be included in research inventory.

The ITC co-sponsored two campus-wide events that explored the current state of research computing on campus in the sciences, arts and humanities. These events focused on the ability of UW's research computing infrastructure to support the needs of researchers and to identify barriers and how to correct them. The first of these was largely (not exclusively) representative of research in the sciences and engineering while the second mainly focused on research computing in the arts and humanities. The ITC discussed a draft of a white paper on research computing, which was a summary of the themes that arose from the first research computing symposium. One very strong conclusion was that the "human" side of research computing needs better cohesion and campus-wide sharing of information. The final version of the white paper was presented to the provost in February.

A survey was conducted to assess the current status of research computing needs on campus. The survey indicated that network and storage are high priorities. Network work is underway, and the campus should now address storage management.

The committee discussed the merits of creating a research computing officer position and a research computing subcommittee. The RCO position required additional consideration. A research computing subcommittee was formed and will continue its work over the summer and next year and report back to ITC. The ITC agreed that the subcommittee should have a clear charge and set of responsibilities, which will provide leadership and direction.

B. Strategic Planning for IT

The ITC worked to maintain the momentum of the Strategic Plan for IT, a major initiative begun in 2008-2009. This was a priority of Interim CIO Joanne Berg, and the group affirmed its support for the planning process. While much has already been done, the ITC and campus should continue to focus on the strategic plan, where we are, and how to move forward.

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Five key initiatives were identified to move the plan forward:

- 1. Improve and align IT resources for researchers;
- 2. Overhaul the funding model for campus IT;
- 3. Implement identity and access management and software;
- 4. Review the integration of data center and data storage centers;
- 5. Develop stewardship policies and invest in security services.

A memo outlining these investments was sent to the provost and to the vice chancellor for administration. The strategic plan so far was presented to the chancellor's cabinet. Goals are an assessment of risk if items are not done and cost-benefit analysis to help the cabinet decide on investments of time, money, and resources. An IT strategic plan advisory council was formed to prepare a risk assessment.

"Theme champions" were identified to determine next steps within the context of each theme. The champions are asking, for example, if new initiatives should be designed and/or if some current charters should be set aside.

An IT strategic plan task force developed a strategic investment recommendation to "dramatically overhaul IT funding, enhance campus standards and recommendations for IT staffing, improve understanding of IT governance and CIO organizational framework."

C. Efficiency Study

The ITC monitored the progress of the Huron-UW efficiency study through the year. Consultants examined IT strategic sourcing (evaluating cost effectiveness of suppliers and areas of duplication) and administrative reorganization. An advisory group of faculty, staff and students was formed to guide the next steps. Some ITC members were interviewed as part of the study. The consultants' report will pass through many iterations, and focus groups will be part of the process. The ITC was eager to play a role in providing input to the consultants.

John Krogman reported that there were no surprises in the IT report from the consultants. The advantages and challenges they identified were similar to those found in the strategic planning process. The report discussed commodity-based services and noted the lack of a formal campus IT prioritization group (several committees give input, but there is not yet a steering committee).

The committee expanded on this topic. This can be an opportunity for the ITC to look at itself in different ways. It may be more apparent now that setting IT priorities is a role for ITC. The role and mission of MTAG (Madison Technical Advisory Group) should also become more clearly defined. Bigger thinking is needed about commodity services (and how to pay for them) and shared governance. John Krogman said that direction from campus would be welcomed and that ITC could do more to set priorities.

D. State Budget Issues and Proposal for New Badger Partnership

At its March 2011 meeting, the ITC discussed budget issues and the chancellor's proposal for a New Badger Partnership. With the university facing a \$125 million budget cut for the next biennium, Darrell Bazzell and Paul DeLuca asked for proposals for 5% and 7.5% reductions.

The New Badger Partnership looked at flexibility and accountability with regard to IT. The committee considered the implications of the public authority for tuition allocations and campus priorities, common systems, personnel systems and HRS, the Huron-UW efficiency study, and the IT strategic plan.

E. Human Resources System (HRS) Project

The ITC received frequent updates on the status of this critical effort, the largest IT project ever undertaken at UW. HRS was launched with mixed success in April 2011. The \$81 million project involved the efforts of more than 500 people from all UW campuses, with 170 on the project team (including Huron consultants).

F. Email, Calendar, and Chat (ECC) System Development

A campus team began the task of exploring options for email, calendar and chat tools. Vendor support for the campus's current calendar tool will be withdrawn soon, spurring the need for an evaluation of alternatives and consideration of email and chat options. Gathering input from the campus is essential. The final solution could involve more than one application. Users may want a choice. Group discussion centered on the approaches taken by other universities in the CIC and on concerns for protecting intellectual property.

G. Course Guide

Course Guide is a tab on MyUW-Madison that provides an online, searchable representation of a UW-Madison course to the campus and public, including information about syllabus, methods of testing, the instructor, etc. Released in fall 2009, Course Guide has been popular with students. The ITC heard reports on enhancements to the system. Those included improved searching and better use of Faculty Center, which enables faculty to enter their textbook information and syllabus and add keywords and course description. Various approaches were discussed for encouraging faculty and support staff participation and improving the quality of information they provide.

Course Guide is an ongoing project, and upgrades will continually be added as time and resources allow. The ITC approved a set of recommendations for phase III of Course Guide to include full search and archival capabilities.

H. eLearning Roadmap/Personal Publishing

The Campus eLearning Roadmap Group reported to the ITC on its activities. The group is specifically charged with the portion of the IT strategic plan regarding the suite of e-learning tools. The report focused on the Personal Publishing Project. Gaps in web-based publishing force instructors to use third-party applications, which increases workload for faculty and raises authentication and support issues. Instructors cannot quickly build a website and host it on a campus server, for example. They instead stumble through course management systems that were not created for these jobs.

A two-tiered solution is envisioned: personal publishing with blogger features added to UW-Madison Google application services. A Drupal-based tool was funded for pilot testing. The ITC asked about guidelines or restrictions for what can be legally published on a university website. While policies for students are in place, faculty policies need to be considered. Personal and professional identity must be considered to avoid confusion about personal statements of faculty members being misinterpreted as university-sanctioned opinions.

I. Digital Curation

Jan Cheetham of DoIT and Dorothea Salo of UW libraries discussed Research Data Services, a campus initiative to help researchers manage digital assets and research and meet new NSF requirements for managing data. Areas include storage, long-term preservation, documenting, current formats, adding meta data, sharing, and providing access. The project team is looking for ideas, partners, sponsors, and projects.

J. E-Notebooks

The committee heard a presentation on a project investigating the use of e-Notebooks. Electronic lab notebooks replicate traditional lab notebooks, offering advantages over paper forms, which are legal documents. Gathering data in digital form can make backup, search, sharing, etc., easier, but there are also challenges, such as security risks and storage. E-Notebooks will likely provide the capability to embed certain types of data, link to public data sources, or take a snapshot of data, which may change. Authentication for an original file is important for legal reasons. The project team is now evaluating products and studying legal and technical aspects.

K. Healthscapes

Healthscapes is a suite of web tools for studying global environmental health. Its mission is to build a web platform for global environmental health research that fosters collaboration across disciplines and national boundaries, accelerating discovery, advancing outbreak detection, and improving prevention. It includes applications in ecology, computing, health, spatial analysis, emergency management, and international development.

The committee heard a presentation on Healthscapes by postdoctoral fellow Neco Preston and Professor Jonathan Patz. Healthscapes is an example of how researchers can share and collaborate. It provides simple ways to scour information available on the web. The ITC discussed whether Healthscapes could be adapted as a tool, for example, for building the research computing community at UW also (rather than re-typing information that has been identified in many instances).

L. Student Information Technology Initiative — Funding Recommendations
Rhonda Thompson of the Student Information Technology Initiative Advisory Committee (SITIAC)
discussed SITIAC's process for recommending allocations of student technology fees. SITIAC was formed
as an advisory committee / shared governance group to advise on use of unallocated funds. It includes
faculty, academic staff, students, a member of the UW-Madison Student Information Technology
Committee, and representatives from DoIT and the CIO's Office.

SITIAC is charged to ensure that SITI funds are spent on new, potentially enterprise-level technologies or technology-related support services that could serve all students on campus. Funds are not used for new structures, remodeling, existing services, or services for a single school or college. The group recommends project funding to the CIO.

The SITI Fund for 2010-2011 is in excess of \$8 million. After receiving funding proposals, SITIAC sent funding recommendations to Interim CIO Joanne Berg and to Paul DeLuca, Darrell Bazzell, and Lori Berquam.

The committee noted that the process should be transparent, and the CIO website would be a good place to post results. Students were well represented on this committee, and more input from students should be sought next year. The ITC could help to encourage student involvement in generating proposals.

M. IT and Campus Construction Projects

The ITC received updates on campus building projects, with an eye to ensuring the adequacy of IT infrastructure in those projects. One such project was the renovated Education Building, with its meeting, seminar, and conference spaces and classrooms. The building has a data center, Cisco Telepresence room, audiovisual operations room, and other facilities. Members of ITC toured the new building.

Kristin Eschenfelder of the Campus Planning Committee updated the group on other construction projects under way and under review.

N. Security

Following press reports of a 2008 security breach at Memorial Union, the ITC met with campus security officer Jim Lowe to review the incident and discuss the status of campus IT security. The union system has now been firewalled, and sensitive data has been removed. Ensuring that a similar incident does not occur remains a larger challenge. An internal audit is under way. Jim noted that campus IT security can conduct risk analyses for campus units at no charge. Remediation following a breach can be very expensive.

O. CIO Search

Two members of the ITC (Jon McKenzie and Katrina Forest) were on the search committee for a new campus CIO, and the ITC received frequent updates on the progress of the search. A draft of the position listing was distributed to the committee before it was posted. It was noted that the language on the reporting structure was vague, though the CIO would hold a vice-provost position and be part of the chancellor's cabinet. The finalists were a strong, interesting, diverse group, representing research, administration, deans, national labs, etc. The outcome of the process is that Bruce Maas (current UW Milwaukee CIO) will become the new UW-Madison CIO this summer.

P. Looking to Next Year

The committee shared ideas about important topics to be considered in 2011-2012. Those included:

- Humanities lab Libraries and faculty partners are exploring a humanities lab for new types of research in humanities. Now in its infancy, the lab would benefit from ITC reaction.
- Instructional tools available for faculty The Wisconsin Collaboratory for Enhanced Learning (WisCEL), funded under the Madison Initiative for Undergraduates (MIU), is set to open in January 2012.
- Digital Humanities Another design lab was also funded through MIU, for ten TAs. The ITC could do a series of events around design, provide workshops and training, and determine services for undergraduates.
- Visualization within research computing.
- Use of high-level words or communication More clearly define a common language on such terms as access management and governance.
- Comparisons with peers Investigate the IT governance and operational models at other CIC campuses. What are the functions of advisory and operational committees? What is purchased at other campuses and how? What are their structures for shared governance and IT governance the nuts and bolts of charters and sponsors? Understand functional decision-making processes at other CIC schools. There are different interpretations of how things work on a campus depending on which constituents are talking.
- EDUCAUSE resources and research and professional development offered.
- Academic and student services technologies and how they are supported With MIU funding, etc., what systems are out there? Can ITC discuss technology tools for student advising? We will be moving toward a central advising service; the newly hired director of advising will work with a (to be named) staff member dedicated to advising-related technology.

III. Current Issues or Concerns

As IT at UW-Madison has grown over the past several decades, so have the number of matters in which the ITC could be expected to play a governance role. We recognize a need to function more fully within our charter and to engage in IT issues that require our input or guidance as a Chapter 6 shared governance committee.

IV. Summary/Recommendations

The ITC focused strongly during 2010-2011 on research computing and strategic planning, including the beginnings of the Huron efficiency study as well as our regular topics of security, teaching and learning initiatives, and DoIT projects. In the coming year we expect to be involved as a shared governance committee in the progress of the efficiency study. We also plan to devote energy to how the ITC can best serve the many teaching and learning IT groups on campus.

We gratefully acknowledge the energetic, generous and thoughtful leadership of Joanne Berg as interim CIO during the 2010-2011 academic year.

V. Committee Membership

Faculty

Craig Benson, Civil and Environmental Engineering; Physical Sciences Ivy Corfis, Spanish and Portuguese; Art and Humanities Kristin Eschenfelder, Library and Information Studies; Social Studies Katrina Forest (chair), Bacteriology; Biological Sciences Mathew Jones, Physiology; Biological Sciences Jeffrey Linderoth, Industrial and Systems Engineering; Physical Sciences Jon McKenzie, English; Art and Humanities Yongming Zhou, Anthropology

Academic Staff

Eric Alborn, School of Business
Paul Oliphant, Computer Aided Engineering
Michael Pflieger, College of Letters and Science Student Academic Affairs

Students

Sharad Brahma Akshar Punuganti, Computer Sciences Elliott Rezny, Computer Engineering and Science

Non-Voting Members, Ex Officio

Joanne Berg, Interim CIO and Vice Provost for Information Technology John Krogman, Deputy CIO and Chief Operating Officer of DoIT

Provost Appointments

Steve Hahn, Graduate School Clare Huhn, Provost Office Tim Norris, Office of the Vice Chancellor for Administration Ed Van Gemert, General Library System

Campus Liaison, Group

Lisa Jansen (LSS), Community of Educational Technology Support Rob Kohlhepp (CAE), Campus Technical Issues Group Richard Kunert (Biotechnology Center), Network Advisory Group Mike Pitterle (Pharmacy), Community of Educational Technology Support

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Frequent Visitors

Jeff Bohrer, DoIT-AT-LTDE

Bruno Browning, College of Letters and Science Learning Support Services

Perry Brunelli, DoIT Network

Christopher Blaire Bundy, DoIT AT

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

Steve Krogull, DoIT ATS

Alan Ng, Continuing Studies

Jeanette Phillips, ISIS Central, Division of Enrollment Management

Brian Rust, CIO/DoIT Communications

Catherine Stephens, MERIT, School of Education

Eric Straavaldsen, College of Letters and Science Student Academic Affairs / Administration

Tom Wise, Facilities Planning and Management / Space Management Office