

INFORMATION TECHNOLOGIES COMMITTEE
MINUTES OF MEETING
NOVEMBER 2, 2004

[In these minutes: 2006 - 2007 21st Century Technology Initiative, Plagiarism Prevention Software, WebMail]

[These minutes reflect discussion and debate at a meeting of a committee of the University of Minnesota Senate or Twin Cities Assembly; none of the comments, conclusions or actions reported in these minutes represent the views of, nor are they binding on, the Senate or Assembly, the Administration or the Board of Regents.]

PRESENT: Andy Lopez, chair, Nancy Herther, Dale Swanson, Stephen Cawley, Linda Jorn, David DeMuth, Lynda Ellis, Douglas Ernie, Stuart Speedie, Tun Jie, Pushkar Ojha, Mahmoud Sadrai

REGRETS: Mark Sanders, John See, Eric Celeste, Jim Waddell, Nancy McGlynn

ABSENT: Jeff Johnson, Alan Ek, Greg Laden,

GUESTS: Linda Ellinger, Jonathan Poppele and Mark Cahill

OTHERS: Bernard Gulachek, Myron Lowe, Shih-Pau Yen

I). Professor Lopez called the meeting to order.

II). Professor Lopez called on CIO Steve Cawley to share information on the 2006 - 2007 21st Century Technology initiative. An excerpt from the executive summary of the *2006 - 2007 Biennial Budget Partnership Proposal: Ensuring Excellence* was distributed to members for their reference. Mr. Cawley cautioned members that while the State's financial situation has been slowly improving, the competition for State funds will continue to be very intense.

Mr. Cawley highlighted the following:

- The 21st Century Technology initiative is being promoted as a partnership with the State. The goal is to have half of the money for this initiative funded by the State in new money and the University, through its reallocation process, would fund the other half of the initiative.
- This initiative will focus on:
 - The biosciences for a healthy society.
 - Attracting and retaining talent for Minnesota's future.
 - Creating and sustaining a central research and technology infrastructure.

- Specific projects under this initiative include:
 - Financial System Replacement Project
 - High Performance National Research Networks e.g. Internet2, National Lambda Rail.
 - Imaging technology - turning paper documents into digital documents.
 - Data storage - reliable and scalable data storage strategies are critical to the University's technology infrastructure.
 - Support for the learning environment e.g. classrooms, advising and Portals.

Comments/questions from members:

- Did the University in the past make a request to the Legislature to replace CUFS? Mr. Cawley recalls making two requests to replace enterprise systems, both of which the State provided some funding, but neither request was to replace CUFS specifically.
- Regarding the high performance national research networks, when institutions contribute to these networks what are they actually buying? Mr. Cawley stated that the money is being used to purchase optical networks/fiber. The initial \$5 million investment required to buy into these networks provides for building the backbone; then, a regional optical network needs to be built to connect to the backbone. The University expects to have to spend an additional \$2 - \$3 million to build its regional optical network. Right now the focus is on what can Iowa, Wisconsin and Minnesota do cooperatively to build its regional network. Mr. Cawley noted that this project does not only benefit research institutions but all schools across the State e.g. K12, all MnSCU campuses, all University of Minnesota campuses.
- What is the status of the document distributed earlier, the executive summary of the *2006 - 2007 Biennial Budget Partnership Proposal: Ensuring Excellence*? Is this a final draft? The Board of Regents has seen the document, although Mr. Cawley is uncertain whether it has been officially approved. Eventually he stated that the document would be boiled to a formal request using the State's required format.
- How does the legislative request get integrated into the University's strategic planning process? Mr. Cawley stated that they are separate efforts, but, while there should be some continuity, this is not always the case.
- A member suggested emphasizing the cutting edge angle of the 21st Century Technology Initiative to the Legislature. This is very progressive material, which the Legislature is undoubtedly interested in learning more about.

III). Professor Lopez called on Linda Ellinger and Jonathan Poppele to share information on plagiarism prevention software. Ms. Ellinger noted that she is the University's account administrator for Turnitin[®], an on-line plagiarism prevention software. The University's rationale for entering into an agreement with Turnitin[®] was to be able to offer faculty and instructors a tool for preventing plagiarism.

Next, Ms. Ellinger distributed a copy of the email, which was sent to all University faculty and

instructors informing them about the University's site license with Turnitin[®] and how to access the service. Before proceeding, Ms. Ellinger made the disclaimer that Turnitin[®], or any other plagiarism prevention software, is by no means the best way to deal with plagiarism. Instead, the best way to deal with plagiarism is to develop creative, appropriate assignments for students, which discourage plagiarism and for faculty and instructors to be involved with their students.

Ms. Ellinger noted that there are many on-line resources for students to obtain papers, outlines, etc. Besides the typical websites where students go and get information, there are numerous paper mills, e.g. <http://www.cheathouse.com/>, <http://www.gradesaver.com/>, etc. Ms. Ellinger encouraged members to explore these paper mills as it is shocking to discover what is available.

A Canadian report, *Technology and Plagiarism* by Peter Tittenberger (<http://www.umanitoba.ca/>) was distributed to members. While Ms. Ellinger did not go through the report in detail with the Committee, she encouraged members to review this very thorough report to learn more about plagiarism prevention software. She also distributed the first pages of four plagiarism prevention service websites: <http://www.plagiarism.com/>, <http://www.canexus.com/eve/index.shtml>, <http://plagiarism.phys.virginia.edu/links.html>, <http://www.turnitin.com/static/home.html?session-id=023cb3272634a2bc9271c03eb6ae7a7d>.

Additional information highlighted by Ms. Ellinger included:

- Turnitin[®] does not find information that is not on-line.
- The success of Turnitin[®] is dependent on the size and scope of its database.
- Turnitin[®] has a collaborative agreement with WebCT. This means faculty using WebCT can have Turnitin[®] links appear directly on their web pages, thus allowing students to upload their papers to Turnitin[®] directly from a WebCT page. This would be an added feature, which the University would need to purchase.
- The University has been able to negotiate a fairly reasonable contract with Turnitin[®]. Typically Turnitin[®] charges by the size of the institution, but given the limited use by University faculty/instructors, a pro-rated rate has been negotiated.
- After the first two years of having an agreement with Turnitin[®], the University conducted a fairly extensive survey to determine why some faculty chose to use the software and why others did not.
- Student concerns around Turnitin[®] include:
 - Ownership of the material.
 - Privacy issues - is it possible to personally identify a student's material? Ms. Ellinger has contacted Turnitin[®] to find out how long they keep personally identifiable data connected to a student.

Questions/comments from members:

- How many faculty and instructors use Turnitin[®]? Not many, but the ones that do really

- like it stated Ms. Ellinger. There are approximately 30 individuals that use it on a regular basis and another 40 - 50 that use it occasionally.
- How much would it cost to cover the coordinate campuses on the University's site license with Turnitin? Ms. Ellinger acknowledged that the coordinate campuses have expressed an interest in being able to use Turnitin. Turnitin according to Ms. Ellinger, has made it very clear that they are not interested in system-wide licenses. However, with that said, MnSCU has expressed an interest in contracting with Turnitin so there may be a first-ever statewide license agreement in the making. MnSCU is leading these discussions with Turnitin.
 - A member shared a story on a study that was conducted over a decade ago on cheating. Has any research been done on the most common ways students cheat on the Twin Cities campus? Mr. Poppele indicated that there are numerous ways in which students cheat. He expects the most common method is copying and pasting off of websites. In Mr. Poppele's opinion, students often lack a very sophisticated understanding of the distinction between quoting, plagiarizing and the proper use of citation techniques. He added that Turnitin can actually be a very useful tool for educating students about these differences.
 - With the small number of faculty regularly using Turnitin and the amount of money that is being spent on this service, does this send the message that the University is relying too much on technology for technology's sake? Ms. Ellinger disagreed and believes much of the emphasis in many programs, especially those that require a lot of writing, is prevention as opposed to detection.
 - How good is Turnitin at detecting a paragraph which has been cut and pasted and then had the words rearranged? Both Ms. Ellinger and Mr. Poppele stated that Turnitin is very good at detecting this type of plagiarism.
 - A member suggested holding faculty workshops/informational sessions to share information about Turnitin but also use it as an opportunity to openly discuss issues around plagiarism. Ms. Ellinger admitted the University probably should be more proactive in educating faculty about Turnitin and the issues surrounding plagiarism in general.
 - A comment was made that often discussions in the DMC's On-Line Teaching Strategies course reflect the notion that introducing plagiarism software at the course level will interfere with the trust that develops between faculty and their students. In reality, it is an excellent instructional tool for teaching students about plagiarism.

IV). Mark Cahill provided an overview of WebMail. He supplemented the information he shared with Committee using a PowerPoint presentation. Mr. Cahill highlighted the features of WebMail:

- Robust, load-balanced architecture.
- Replicated settings database.
- X.500 authentication for single sign-on.
- IMAP e-mail server.

- Mail notification via MyUPortal.

Usage information:

- 126,000 sessions per day; 50% reduction in usage on weekends and when classes are not in session.
- Sessions are originating from approximately 34,000 unique IP addresses per day.
- 121,000 users at one time or another have changed their user preferences and approximately 49,000 have set up address books.

WebMail is a very cost effective system. According to Mr. Cahill's calculations, the cost to operate WebMail is \$46 per day and the system serves 34,000 users with 126,000 sessions per day.

WebMail challenges:

- Maintaining a system that is operational 24 hours per day, 7 days per week and 365 days per year.
- When the e-mail servers are getting backlogged, the user is unaware of this and tends to blame WebMail.
- The University has repeatedly explored finding a better WebMail software, but to install a better software would require that it integrate with the University's single sign-on infrastructure as well as be able to run over an array of servers. Currently, the University is still supporting POP on its central mail servers. It is better for all users to either use POP or IMAP, but not both, due to their incompatibilities.
- There are web page limitations related to the mail user interface.

New features:

- Added a "Sent Mail" folder and a "BCC" (blind carbon copy).
- Improved handling of HTML links.
- Added links to MYUPortal and Techmart.
- Added security features.

Considerations for enhancing/improving the system:

- To add desirable features e.g. spell check would place more load on the servers and would make it clumsy to implement as a web page.
- Take advantage of PC intelligence, which could provide better user interface and minimize server-side costs.
- Explore an applet based WebMail alternative using a programming language called Squeak, which runs consistently on Mac, Windows and Linux.

Questions/comments from members:

- Why is WebMail painfully slow when accessing from off-campus? Is this a University problem or a problem at the other site? According to Mr. Cahill, it depends on the

- day. Performance monitoring is done constantly. He asked that a date and time be provided to him and he can investigate it further.
- Why does the whole mailbox need to be brought in at once versus other systems that only drop a page of mail at a time? Mr. Cahill noted that retrieving a large list of mail is often exacerbated with certain web browsers. If this is the case, Mr. Cahill suggested using another browser if one is available.
 - A member expressed concerns with enclosures when using WebMail. Mr. Cahill admitted that enclosures have always been difficult even when WebMail is not being used because there are numerous way of including an enclosure. Some mail applications incorporate enclosures in a couple different formats, and then allow the recipient to choose which enclosure format to open. The University has avoided doing this because this would make the system even slower. Mr. Cahill suggested developing standards for what the University should support in terms of enclosures in general, and not only related to WebMail, should be a priority.
 - It might make more sense to integrate the department that deals with WebMail and the department that deals with the central e-mail server in order to improve the overall product. Mr. Cahill agreed that both departments should and do have a strong working relationship. There is a history of these two departments working together on projects. The philosophy behind operating these systems separately allows for a virtual firewall. Mr. Cahill is not convinced that putting these systems on one hardware platform will improve the system. In fact, it will likely make the server more difficult to manage. It appears that the current model is the best way to manage these infrastructural core services.

Mr. Cahill believes the long-term solution for addressing many of the concerns mentioned today would be to retain the HTML WebMail, but install a better toolkit in order to improve the user interface. Given some newer tools that have been acquired, Mr. Cahill is confident that he could build a better user interface, but to make these enhancements to the system would require users would need to run an applet or plug-in.

Mr. Cahill noted that many WebMail users are treating WebMail as their primary means to read e-mail. The initial goal of WebMail was to make it the e-mail of last resort. He suggested rethinking how the application has been designed for the heavy users.

V). Professor Lopez in light of time postponed the last agenda item, Spam and viruses, to the December 7th meeting. Other agenda items for the December agenda include wireless, network security and network upgrade updates.

VI). Hearing no further business, Professor Lopez adjourned the meeting.

Renee Dempsey
University Senate

