

CLASSROOM ADVISORY SUBCOMMITTEE
MINUTES OF MEETING
FEBRUARY 2, 2009

[In these minutes: Update on Resolutions Passed in December, Fall 2009 Scheduling Update, Class Capture, Student Response Systems, Legacy Technology in Classrooms]

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

PRESENT: Thomas Michaels, chair, Michael Hannon, Steve Fitzgerald, Linda Jorn, Jeffrey Lindgren, Keya Ganguly, William Gleason, Jeffrey Hammer, Jay Hatch, Jean King, Kathrin Hahn, James Hambleton, Nikolai Kleven

REGRETS: Michael Berthelsen, Roberta Juarez

ABSENT: Priscilla Cushman

OTHERS ATTENDING: Mike Garza

GUESTS: Toni Pangborn and John Knowles from the Office of Classroom Management

I). Professor Michaels called the meeting to order and welcomed those present.

II). Professor Michaels provided members with an update on the two resolutions it passed at the December 2008 meeting:

- A resolution asking SCEP to reinforce the ability of the Office of Classroom Management (OCM) to enforce existing scheduling policies in light of the urgent course scheduling issues it faces.
- A resolution having to do with a classroom needs assessment.

He noted that SCEP held the classroom needs assessment resolution over to a future meeting for discussion, but that SCEP discussed the scheduling resolution. Professor Michaels went on to share some of the interesting arguments that came out of the discussion.

Professor Michaels stated that Steve Fitzgerald will share additional information about what progress has been made with the scheduling issues momentarily. He added that this semester he would like the committee to take up technology in the classroom. Depending on the outcome of this discussion, the committee may want to draft a report to SCEP or offer advice to OCM about new classroom technologies. With this in mind, Professor Michaels encouraged members to bring forward ideas for future agenda items. Professor Gleason mentioned having heard anecdotally that some members of the University community believe the University should explore segregating buildings into either strictly

classrooms or strictly research facilities. He requested that this be on the committee's agenda for a future meeting.

III). Professor Michaels turned to Steve Fitzgerald, director, OCM, for a fall 2009 scheduling update. Before providing this update, Mr. Fitzgerald stated that the situation last week when the Electrical Engineering and Computer Science Building had a water leak is a prime example of why classroom swing space would be a valuable resource. This incident took the building off-line for a period of time. Fortunately, the leak happened on a Friday when classroom utilization is lower, and OCM was able to relocate the affected classes. However, had this happened almost any other day of the week, particularly on a Tuesday or Thursday, OCM would have not been able to relocate all the affected classes. Swing space is not only beneficial from a construction/renovation standpoint, but it is also important in emergency situations like the one that took place last week.

Regarding spring 2009 classroom scheduling, OCM was able to get all class sections placed at the last minute, but only by using temporary space and substandard space in Norris Hall and Peik Gym.

Demolition is underway on the Science Classroom Building in order to make way for the new Science Teaching and Student Services (STSS) building. Mr. Fitzgerald added that beginning in August 2009, 1701 University will also be taken off-line as well as other spaces where OCM has temporary classrooms. In light of all this space being taken off-line, classroom scheduling for fall 2009 will be tremendously difficult.

Attached to today's agenda, noted Mr. Fitzgerald, is a copy of the letter from Provost Sullivan sent to the deans strongly encouraging departments to adhere to the existing scheduling rules. As a result, a tremendous amount of work has been taking place collaboratively between departmental schedulers, the assistant or associate deans in the various colleges and the OCM scheduling unit. There is a new page on the OCM website titled 'Scheduling Improvement Resources,' which contains updates for schedulers along with other resources - <http://www.classroom.umn.edu/scheduling/improve/index.html>.

In terms of a scheduling status update, the first Electronic Course Scheduling (ECS) Period 1 ended on January 16, 2009. According to Mr. Fitzgerald, not every department got all of their required materials in by the deadline. As a result, OCM has not opened ECS for spring 2010. OCM is currently deeply enmeshed with department schedulers working on fall 2009. It is essential that everyone recognizes that for every department that eliminates a non-standard time course, for example, that students benefit because they have greater access to courses and departments benefit because the problem really comes out of the hide of every other department that uses general-purpose classrooms.

Professor Hatch commented that some of the resistance from faculty within departments was their lack of understanding about the problem. Often once they understood the implications of having non-standard courses, for example, many were willing to make the necessary changes.

What size rooms are in shortest supply, asked Professor Hatch? Despite what many people think, the rooms in shortest supply are not auditoriums but in smaller classrooms, stated Mr. Fitzgerald. This is where department classrooms can help because department classrooms, by in large, are smaller. OCM is working with departmental schedulers to improve utilization of smaller departmental classrooms to unload the system a bit.

IV). Professor Michaels welcomed John Knowles the instructional coordinator in OCM and Lance Cunningham from OIT (Networking/Telecom Services) who were invited to provide the committee with information on classroom emerging technologies.

To begin, Mr. Knowles distributed information on class/lecture capture. OCM has been investigating this technology dating back to roughly 2003. The goal has been to capture lecture content and record it for recall by students, generally asynchronous, and not a live broadcast. OCM has tested a number of pilot systems, which generally involve streaming content that is put on a server for later viewing. These pilot systems were moderately successful, but often required proprietary, expensive hardware solutions, which were not particularly scalable, a criteria for which the University has for deploying the product in a large number of classrooms. Since OCM began researching various class capture systems, students have made it clear that they want class capture that is downloadable rather than requiring a network connection. Many students find class capture particularly helpful for review purposes. For faculty, on the other hand, their most important criteria is that the technology be unobtrusive; they do not want to deal with a lot of equipment.

Currently, OCM is piloting a product called Camtasia Relay. Instead of proprietary boxes that are permanently installed in classrooms to capture content, this product is server-based and OIT operates it. The user would have software on his/her PC or Mac laptop that would record everything that is presented in addition to the audio content. Camtasia Relay, however, does not have camera capabilities at this time, but the general feeling is that camera capabilities are not necessary. The product is a high quality, scalable product that has been successfully tested at the University.

Professor Michaels asked about the audio format. Mr. Knowles explained that this product captures the audio, which is then converted to a podcast-friendly format. The audio is converted on the server side for later delivery. It should work on all iPods and definitely works in iTunes, stated Mr. Knowles.

A key feature of the product, stated Mr. Knowles, is that the software can be put on any number of laptops because there are no limits on the number of copies of software that can be installed on instructor's laptops.

In response to a question about the cost of Camtasia Relay, Lance Cunningham stated that all the costs associated with Camtasia Relay are on the server side of the equation. There are no costs for downloading and installing this product on laptops across the University. To date, University has invested approximately \$10,000 in software and

equipment for Camtasia Relay, which is a fairly minimal investment, noted Mr. Cunningham.

Professor Gleason asked about the scalability of the University's investment in Camtasia Relay. Mr. Cunningham stated that at a certain point the University may have to add additional servers and a cluster to handle load. The current server can handle a large number of accounts, potentially up to a couple thousand. Good load testing has yet to be established, but the server has eight simultaneous processors. The short answer, stated Mr. Cunningham, is that the product is very scalable.

Is use of Camtasia Relay voluntary for faculty, asked Professor Gleason? Yes, stated Mr. Cunningham, currently there are only a limited number of users. Workflow process kinks are still being worked out.

How will intellectual property issues be handled, asked Professor Gleason? Based on discussions with the Office of the General Council (OGC) on this matter, stated Mr. Cunningham, instructors will be given a number of choices about how they want their content distributed. For example, they can distribute their content through iTunes U under X.500 authentication. According to the OGC, content within the recording (what the instructor is presenting) is owned by the instructor; however, the recording itself of a particular course section is the property of the University of Minnesota.

Moving on, Mr. Knowles provided information about iTunes U, which he noted is more or less an offshoot of Apple's iTunes music store. It is a clearinghouse or distribution channel for educational content at the university level. iTunes U has allowed institutions that contribute to it to have a streamlined way of distributing content. Institutions have control over the content they put on iTunes U. A member stated that some people are using iTunes U as a peer feedback mechanism.

Kathrin Hahn asked about the incentive for students to come to class if class content is downloadable for recall by students. Mr. Knowles stated that this is a huge issue. Personally, stated Mr. Knowles, while the recording conveys a lot of what happens in class, it does not capture the interaction that takes place in the classroom. With this type of system, students are only able to download PowerPoint content and audio, and not everything that took place in class. Mr. Fitzgerald added that this is a valid concern for lecture-type courses, but if one looks at it in the context of the Active Learning Classroom environment where there is a lot of team interaction, peer-to-peer interaction, and teacher to student activity, students would miss out on all this if they did not go to class.

Professor Gleason stated that it is the University's obligation to see to it that instructors are provided with what they need to teach regardless of how they choose to teach. With that said, he believes the best approach is to not spend a ridiculous amount of money on a system that is not compatible with the direction the University wants to go in the long run. Mr. Knowles stated that Camtasia Relay is very scalable, and has not been a

massive investment for the University compared to other products that are available in the marketplace.

In response to Ms. Hahn's question about the incentive for students to attend class, Mr. Cunningham quoted from the Educause handout, *7 things you should know about...Lecture Capture* and read aloud, "Some worry that students may cut classes in favor of viewing captured lectures. Yet, from the advent of the cassette tape through the podcast, students have found that recordings take as much time to absorb as a live lecture, but without the opportunities for question-and-answer or interaction with their classmates." Increasingly, as class capture is getting integrated into university settings, the initial fear that students would not attend classes is becoming less of a concern than initially thought.

Mr. Knowles and Mr. Cunningham then took a fair number of detailed questions from members who were interested in system specifics, e.g., use of microphones with the system, how to start the system, etc.

In closing, Mr. Knowles encouraged members who think of additional questions following the meeting to email him or Mr. Cunningham. Professor Michaels asked a final question about whether any changes or accommodations would be required in classrooms in order to use this system. Mr. Knowles stated that the obvious issue relates to the use of microphones, which is a fairly expensive proposition. He added that overall Camtasia Relay works well within the confines of the University's Projection Capable Classroom model. Mr. Fitzgerald concurred and stated that Camtasia Relay works well in the University's general-purpose classroom environment. While there are similar functioning systems in the marketplace, they typically require hardware installations, have licensing schemes that are not scalable, and frequently are not user-friendly and/or reliable to the extent that Camtasia Relay is easy to operate, scalable and reliable.

V). Mr. Knowles then provided information on student response systems. He noted that this is not a new technology, and proceeded to provide a brief history. A problem that OCM recognized from the onset concerning student response systems was the interoperability between system vendors. The systems tend to be proprietary and not compatible.

An investigation into student response systems (SRS) resulted in a report, which recommended a particular SRS system, the TurningPoint audience response system (<http://www.turningtechnologies.com/>). This system was found to be the most effective in terms of cost, reliability, PC and Mac compatibility, and operability with WebVista and WebCT. TurningPoint is officially supported at the University.

In response to a question, Mr. Knowles noted that this system would work in classes that have a mix of iPhone and laptop-using students as well as traditional clickers. This is one of the attractive features of the system. He added that in the past, registration of clickers was an obstacle for instructors using these systems. With TurningPoint, the tools are already within WebVista making it more user-friendly.

Professor Gleason commented that some educational institutions are prohibiting the use of technology, e.g., laptop use, during class time. There are also students who do not like the clicker systems. While new technology should be made available to faculty that want to use it, cost effectiveness should be an important consideration. Mr. Knowles stated that an Internet-capable system such as TurningPoint is not that expensive once the back-end is paid for. He agreed that there are different views on use of technology in classrooms. Professor Gleason stated that there is an interesting website called <http://universitydiaries.com/> that addresses the intrusion of technology in classrooms issue.

Regarding a question about the number of instructors using SRS systems at the University, Mr. Knowles did not have any quantitative data on this number. Linda Jorn stated that this is a difficult number to come by because while some faculty and students buy the clickers, other colleges purchase the systems and have students check them out. It is a very distributed model, which makes getting at numbers difficult.

Ms. Hahn asked about how students feel about student response systems? Mr. Knowles stated that there are mixed feelings about this technology. Some students feel as if it is a way for instructors to know if they are in class and others who really enjoy the interaction the system facilitates.

Professor Hatch asked how a faculty member would find out about how to get set up if they wanted to use a clicker system. Mr. Knowles stated that this varies from college to college and department to department. Faculty can contact OCM and they will do their best to point him/her in the right direction, but right now there is no one centralized department that handles this.

More information about student response systems can be found at:
<http://www.classroom.umn.edu/support/support-srs.html>.

VI). Moving on, Toni Pangborn shared information about legacy equipment in classrooms, e.g., VCR equipment, overhead projectors. She noted that there will be a point in time when courses that use certain types of media requiring specific types of hardware will become increasingly difficult if not impossible to purchase. With this said, at what point should the University as a campus decide that this equipment will not be supported in classrooms? In response, Professor Gleason proposed that the University agree to convert faculty materials and simply set a date and notify faculty.

Mr. Knowles stated that because there is so much old media in the library system and department library collections, converting materials is not the solution for a couple reasons:

- There is no budget to convert these materials.
- There are copyright concerns about converting copyrighted materials on to digital media.

Mr. Fitzgerald stated that OCM is bringing the issue of legacy technology to the committee, in part, for information and partly to get the sense of the committee on how this issue should be handled. As resources become more and more constrained, these are issues that need to be dealt addressed. This is one more example in a long list of why it is of great value to not build a lot of heavy infrastructure into central classrooms. For every bit of infrastructure that the University needs to duplicate 300 times in 50 buildings that is a piece of technology that will go away in the not too distant future, and the University will have to pay for it again to get it out of the classrooms. As the University moves into more mobile-based computing thought needs to be given to how to interface with technology, how to project it and how to leverage it without building it into the infrastructure of every room. This is a real challenge, stated Mr. Fitzgerald.

The committee spent the remaining few minutes grappling with the best way to handle the legacy equipment issue. If the committee feels the best way to address this issue is to push for a deadline for retiring legacy equipment and incentivize faculty to convert their materials, asked Professor Michaels, what would be the best way to accomplish that? Mr. Fitzgerald stated that he believes OCM does have a role in informing the University community when equipment is not sustainable. Professor Gleason stated that while this is not an easy issue to resolve, something needs to be done about it.

VII). Ms. Pangborn briefly reported that in the first two weeks of spring semester that 91% of the issues that were reported to the Classroom Support Hotline needing escalation have been resolved. OCM is averaging a one-day or less resolution.

VIII). Professor Michaels thanked today's guests for their presentations. He noted that in light of time the last agenda item, fall semester 2008 classroom hotline/support line call data, trends and observations will be held over to the March 2nd meeting.

Professor Michaels thanked members for their attendance. Hearing no further business, he adjourned the meeting.

Renee Dempsey
University Senate