CLASSROOM ADVISORY SUBCOMMITTEE
MINUTES OF MEETING
FEBRUARY 20, 2006

[In these minutes: Student Response Systems]

[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: John S. Anderson, chair, Caroline Rosen, Steve Fitzgerald, Rachel
Hartreeve, Bernard Gulachek, Roberta Juarez, Steve Spehn

REGRETS: Jay Hatch, Jeffrey Lindgren, James Perry

ABSENT: Andre Prahl, Ken Heller, Jean King, Roger Miller, Josh Kasprzyk,
Vaidyanathan Raghavan

GUESTS: Don Liu, Robin Wright

OTHERS: John Knowles (OCM), Toni Pangborn (OCM)

I). Professor Anderson called the meeting to order.

II). Members unanimously approved the November 21, 2005 minutes.

III). Professor Anderson welcomed todayÕs guests, Robin Wright, associate dean,
College of Biological Sciences and Don Liu, professor, Applied Economics. He noted
that they were invited to demonstrate and provide information concerning student
response systems.

Dr. Wright began by noting that student response systems (SRS) allow students to
respond to questions posed by an instructor, and allow instructors to view student
feedback in real-time. She then provided members with background information on what
precipitated the College of Biological Sciences (CBS) to start using eInstruction,
(http://einstruction.com/), in some of its courses. She noted that besides being easy to use
and portable, student response systems help to engage students in the material and
provide feedback to the instructor in terms of measuring student performance and
classroom participation; thus, permitting for the modification of instruction based on
individual student or group responses. A student response system is also a safe way for
students that typically would not raise their hands in class to participate in a discussion
and is valuable when teaching controversial topics such as intelligent design, for
example. Student response systems can, therefore, be used as an:
- Assessment tool.
- Review tool.

- Discussion tool.
- Attendance tool.

Dr. Wright provided members with a demonstration of eInstruction and distributed ÔclickersÕ to members so they were able to interact with the system, and get a sense for how it worked.

Issues of concern related to the use of student response systems include, but are not limited to:
- Accessibility.
- Lifecycle cost.
- Multiple, non-compatible systems in use across campus.
- Cheating.

Dr. Wright went on to answer questions from members specific to eInstruction.

Professor Liu then shared with members his experience using eInstruction. He noted that he also uses the system to engage his students in learning. He finds that using a student response system helps keep students focused on the material. Students also enjoy the technology aspect of the system.

Professor Liu noted that the committe may want to consider asking the University to explore using the same response system across the entire campus for economy of scale purposes. A member mentioned that UMD intends to do this and will issue an RFP in the not too distant future.

Next, John Knowles demonstrated another student response system to members, ETS Discourse, (http://www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=aa3bb88286677010VgnVCM10000022f95190RCRD&vgnextchannel=415d100792c67010VgnVCM10000022f95190RCRD), which is used in classes offered by the Education Policy and Administration department. This system differs from eInstruction, in that it is a wireless based system and does not use dedicated student transmitters or ÔclickersÕ. Instead, the studentsÕ WiFi-equipped computers/PDAs use the classroomÕs wireless network to link up to the instructorÕs computer, which, in turn, runs the Discourse software. An important advantage to using a system that uses a web browser is that it allows the instructor to ask open-ended questions rather than simply true/false or multiple-choice questions, and for lesson plan modification on the fly. This system is capable of generating lesson reports and summaries.

Potential issues associated with ETS Discourse include:
- InstructorÕs software is currently only available on the Windows platform, but may be used on a Mac OS X computer using Virtual PC.
- Software must be run independently from PowerPoint.

- Departmental IT support or training may be required for initial set up. The instructorÕs PC firewall may need to be disabled in order for the software to run properly.
- Students must have a Wi-Fi computing device.
- Wireless signal strength may impact performance.

The OCM whitepaper was identified as a resource available to those interested in additional information on SRS systems, and can be found at the following URL: http://www.classroom.umn.edu/notes/support_srs.asp

Members spent the remainder of the meeting discussing the pros and cons of the three different types of student response systems, infrared (IR), radio frequency (RF), and WiFi wireless. It was mentioned that in terms of the WiFi system options, not all students have a laptop, and, if they do, they do not always carry it around with them. Mr. Fitzgerald acknowledged this comment but noted that even if students do not have a laptop, a vast majority have other WiFi computing devices with browsers such as PDAs and/or cell phones. He added that while the Office of Classroom Management (OCM) is a strong believer in standards, it also believes that the marketplace develops good technical solutions when technology is rapidly changing as is the case with SRSs. The University needs to be cautious when deciding what types of SRSs to purchase. There is not necessarily one solution that will work best for all classroom environments. The Office of Classroom Management is interested in interacting with early adopters of SRSs to determine how it can best facilitate this capability in central classrooms.

Other concerns mentioned relative to the use of student response systems include:
- Whichever system(s) the University adopts, should work in conjunction with WebCT/WebCT Vista.
- Students should not be required to purchase a plethora of ÔclickersÕ.
- Administration issues need to be thought through before purchasing a system(s).
- Interference issues.
- Textbook vendors bundling SRS systems with books resulting in additional costs to students or departments.

Professor Anderson thanked todayÕs guests as well as committee members for participating in a very fruitful discussion on student response systems. Based on this discussion he stated that while IR (infrared) SRS technology no longer seems to be a viable option, RF and WiFi are feasible options. The intent of todayÕs meeting was not to reach a conclusion on which type of system is best, but to learn about the options available in the marketplace.

IV). Hearing no further business, Professor Anderson adjourned the meeting.

<div align="right">Renee Dempsey
University Senate</div>