INFORMATION TECHNOLOGIES COMMITTEE
MINUTES OF MEETING
DECEMBER 3, 2002

[In these minutes:
Welcome & Call to Order, Bandwidth Management to Improve Internet Access, Dancing Beyond
Boundaries, EDUCAUSE Update – Teaching & Learning Tracks]

[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: April Schwartz, Chair, Mark Bellcourt, Nancy Herther, Thomas McRoberts, Jeff Johnson,
Stephen Cawley, Eric Celeste, Linda Jorn, David DeMuth, Ashutosh Jaiswal, Michael Varian

REGRETS: Josephine Crawford, Yosef Cohen, Alan Ek, Douglas Ernie, Haesun Park

ABSENT: Stephen Downing

GUEST(S): Mary Crimi, Danny Shapiro, David Farmer, Scott Bertelson

OTHER(S): Bernard Gulachek, Ken Hanna, Myron Lowe, Nancy McGlynn, John Miller, Shih-Pau Yen

I). April Schwartz called the meeting to order and welcomed those present.

II).
Members were informed that OIT has received complaints that internet performance is poor when the
University is not shaping the bandwidth.
In an attempt to correct the problem, bandwidth management will be implemented to improve internet access.

III).
Ms. Schwartz introduced Mary Crimi, Network Project Coordinator, Network & Telecommunication
Services, who along with Danny Shapiro, project choreographer, and David Farmer, Network Design
Engineer, Network & Telecommunication Services, provided members with an overview of the 'Dancing
Beyond Boundaries' project. 'Dancing Beyond Boundaries' was an unprecedented distance collaboration
between artists,
engineers, computer scientists and video producers at the SuperComputing
Global Conference in Denver November 12-15, 2001.

First, Mr. Farmer described the role Internet2 played in the project. Aided by a PowerPoint presentation, Mr.
Farmer described in a condensed yet detailed manner the technological intricacies involved in a project of
this nature.

Next, members were shown a video traveling across Internet2. It was noted that rather than the video being
'choppy', Internet2 facilitates smooth, real/full-motion video similar to broadcast television but without the
need to connect with a television station's satellite. It was noted that an ever-increasing number of
applications for Internet2 technology in non-technical fields are being discovered all the time.

While visualizing 'Dancing Beyond Boundaries', the big questions that loomed above the project were:

- Can a dance be choreographed without all the dancers being in a single location?
- Can musicians work together from remote locations?
- In the end, can a real time presentation be successfully produced without all the players being in the same location?

Instead of using the access grid as merely a video conferencing tool, 'Dancing Beyond Boundaries' used it as a palette to view many possible shots, angles and choreographic possibilities. The power to not only communicate, but collaborate with people in remote places in real time on complex projects is one of the greatest applications of the high-speed network known as Internet2. According to Mr. Shapiro, the 'Dancing Beyond Boundaries' project was an interesting experience in shared power between the technically savvy and the art community.
The impetus for this endeavor was from a pure research approach and the question was can it be done?

The publicity CNN gave this production generated a lot of interest from the dance/arts community, and provided the Digital Worlds Institute with a fair amount of limelight as well. To find out more about the Digital Worlds Institute and their role in this project visit the following URL:
http://www.digitalworlds.ufl.edu/SC2001/

Additional highlights from today's presentation and discussion included:

- A majority of the costs associated with a project of this nature tend to be upfront in terms of equipment costs and design costs.

- A member noted that because Internet2 has so much bandwidth, it seems that a lot of time is being spent trying to figure out what to do with it all and there does not appear to be much competition for the bandwidth.
  Hence the question, will there eventually be competition for the large amounts of bandwidth on Internet2? Funding models indicate that bandwidth will continue to grow. From an infrastructure perspective, Internet2 was designed to create a resource glut so that applications will be developed to fill that glut.

- Steve Cawley noted that this presentation relates directly to the University's need to upgrade the overall campus network. Internet2 applications require enhanced network functionality. He further mentioned that NTS offers some matching grant programs as incentives for colleges and departments to do upgrades.

- Most research in the future will be digital based requiring high performance networks. Currently, many NSF (Non-Sponsored Funds) grants have Internet2 requirements. These requirements have been instituted so that grant dollars generate the best possible return on their investment.

- Internet2 has been designed for overcapacity. Not only does Internet2 have routine day-to-day applications but other applications that are much more far reaching. Applications development is being encouraged in all disciplines from the sciences through the arts and humanities.

April Schwartz thanked Mary Crimi, Danny Shapiro, David Farmer, and Scott Bertelson for their thought provoking presentation on 'Dancing Beyond Boundaries' and the future of Internet2.

IV).
Linda Jorn, Director, Digital Media Center, ADCS, OIT, provided members with highlights from the teaching and learning track sessions she attended at the 2002 EDUCAUSE Conference. Key themes of these sessions included:

- Course Management System (CMS):
  - How can course management systems be linked to Enterprise systems?
  - No matter what CMS is purchased the system will never do everything desired by the owner. More testing components, virtual chat room components and other tools required by different disciplines will need to be added.
  - New course management systems are facilitating the sharing of information across courses.
  - Tools are being developed to allow for conversion of information between different systems.
  - New systems have a significant cost associated with them because these systems are Enterprise-wide and are scalable with greater speed.
  - Stanford has developed an OKI Compliant Course Management System called CourseWork. More information can be found at the following URL: http://coursework.Stanford.edu/
  - Ms. Jorn noted an on-line tool that compares 34 course management systems designed for the higher education environment. For more information the following URL was provided: http://www.edutools.info/index.jsp
  - The University of Michigan in conjunction with Indiana University are developing an OKI Compliant Course Management System. The University of Michigan is calling their system CHEF and Indiana University has named their system Oncourse.

- Faculty Development:
  - Provide faculty with the same on-line learning experience as students.
  - Workshops and training sessions for faculty focused on mapping teaching strategies and use of technology to learning objectives and outcomes.
  - Work towards making faculty feel comfortable working in a team environment with an instructional designer when designing their course management systems.
  - Faculty were encouraged to read literature on teaching/learning theory and practice.
  - Initiatives focusing on having faculty participate in 'weeks'-long learning experiences with peers were promoted.
    Examples included 'Hybrid Courses' offered by the University of Wisconsin at Madison http://www.uwm.edu/Dept/LTC/hybrid.html as well as an initiative by Lafayette College - http://ww2.lafayette.edu/~itech/

- Assessment and Evaluation:
  - On-line peer assessment via virtual communities of practice was promoted as well as the importance of defining quality standards for on-line education.
  - Virtual Communities of Practice:
    The NLII (National Learning Infrastructure Initiative) is very interested in the notion of communities of practice and virtual communities of practice. Communities of practices are defined as "groups of people who share a concern, a set of problems, or a passion for a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis."
    For more information on the NLII/EDUCAUSE Virtual Communities Initiative, visit the following URL: http://www.educause.edu/nlii/keythemes/VirtualCommunities.asp

To conclude, the University of Minnesota, according to Ms. Jorn ranks high in terms of CMS national trends. The University currently has several initiatives underway that focus on faculty development, assessment and evaluation and Virtual Communities of Practice.

Ms. Schwartz thanked Ms. Jorn for her EDUCAUSE update.

V). Hearing no further business, April Schwartz adjourned the meeting.

Renee Dempsey
University Senate