

[In these minutes: 1. Discussion of Internet 2, 2. Discussion of Laptops at Duluth]

## **INFORMATION TECHNOLOGIES COMMITTEE (SCIT)**

### **MINUTES**

**THURSDAY, JANUARY 21, 1999**

**11:30 - 1:00**

**STUDIO C, RARIG CENTER**

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

**PRESENT:** Maria Gini (chair), Vicki Gaylord, Laura Gurak, Gary Jahn, Andy Lopez, William Peterson.

**REGRETS:** James Chelikowsky, Ann Hill Duin, Harold Grotevant, Kevin McDowell, Marcel Richter, Andy Rotering, Shih-Pau Yen.

**ABSENT:** Steve Cawley, Susan Galatowitsch, Ben Metzler.

**GUESTS:** Dan Bart, Linda Deneen, David Du, Vince Magnuson, Charlene Mason, Carolyn Parnell.

### **1.INTERNET 2**

Carolyn Parnell distributed a list of planning assumptions that have been assembled for the new switch. She asked for any feedback on this draft version. She said that an advisory group has been set-up, with Marcel Richter as a member. The group meets monthly, and any other interested people are welcome to join. She then distributed a packet of information dealing with Internet 2 and introduced Professor David Du as the Principal Investigator.

This University was one of the first institutions to receive Internet 2. Funding was provided by the NFS and the State, but runs out this fiscal year. Applications are currently running on Internet 2, and more are being looked for. Currently, connectivity is provided by an OC3 connection with Norlight Communications. This is a very expensive connection to Chicago. The University is in the process of reducing this cost by using the fiber backbone provided by Qwest in Minneapolis, as part of the UCAID project.

She then said that the GigaPoP at the University is designed to be a regional resource and therefore has been named the Northern Lights GigaPoP. The cost of \$1.5 million was funded by METC, but also runs out this fiscal year. One of the advantages of this GigaPoP is that it provides a local exchange point to facilitate traffic. Public relations will be starting to garner continued support. There is also a line item in the University's budget for general Internet 2 support.

Professor Du said that there are many questions still facing the University, but Internet 2 must be seen as a long-term benefit. He asked any faculty members with Internet 2 needs to contact him.

The floor was then opened for questions.

**Q:** What is a GigaPoP?

**A:** A GigaPoP is a point where people can link to a backbone of a high speed network. By having it local, it provides greater speed and eliminates connection fees to another GigaPoP. The Great Plains Consortium, consisting of North Dakota, South Dakota, Kansas, Arkansas, and Nebraska, is considering connecting to the

Minnesota GigaPoP. The Learning Network 2, which includes all educational K-12 networks within Minnesota, is also another possible connection. It will also provide a gateway to working with people outside the state.

Q: What is the desired outcome from the promotional efforts?

A: One outcome is for the faculty to benefit from this technology. To achieve this, the University is considering an Internet 2 Day and small seed money grants.

Q: What do faculty need to do to utilize the Internet 2?

A: If any faculty use data between sites either within or outside the state, then Internet 2 should be used. A website is being developed to submit projects. Then NTS will work with the faculty to make sure that the connection is there when they need to use it.

Q: Will this technology impact classroom instruction?

A: Applications, such as video streaming, are coming. Infrastructure will be a key component that NTS will need to work on. Faculty and students will both need to change how they learn and teach with this new technology.

Q: Will NTS be receiving applications for instruction or only for research?

A: Service for instructional purposes is already provided by UNITE. Internet 2 is only useful for connections outside the University. Internet 2 has also been research oriented because of the restrictive policy of the NFS, but this will change with UCAID. The University is prepared by the fiber connection between the Minneapolis and St. Paul Campus.

Q: Will networks in the buildings be upgraded in the long-term?

A: As more applications, including instructional, use Internet 2, NTS will need to work to provide high speed connections to each building on campus.

Q: Who will pay for this infrastructure?

A: Currently, a network connections fund has paid for much of the infrastructure on campus. NTS has designed the network for incremental growth. The PeopleSoft project has also incorporated into it networking standards. To date, most connections have been covered by etherjacks.

Q: From a research point of view, do faculty need special access?

A: Faculty simply need to write a description of what they need. Then NTS will contact different locations to make sure that these locations are also connected.

Q: What are the advantages?

A: Internet 2 provides higher bandwidth and less congestion.

Q: Was a funding request included in the legislative request?

A: Funding is part of the request under NTS as a common goods list.

## **2. LAPTOPS AT DULUTH**

Vince Magnuson, Vice Chancellor at Duluth, said that in November the administration proposed to the campus that, starting in Fall 1999, a laptop initiative be started, similar to that at Crookston. This process would be

phased-in over four years. Several forums were held, and based on the student association's response, there was insufficient support for moving rapidly in this direction. Instead, the decision was made to start a pilot project in Fall 1999 involving 3 programs, 13 faculty, 100 junior-level majors, and 16 courses in total. These 100 students will be issued laptops, and the 13 faculty will tailor their courses for laptop use. The floor was then opened for questions.

Q: Will the students in the pilot project be required to buy a laptop or just rent?

A: Duluth currently has an advanced computer lab access fee, which many students pay because of their major. The students in the pilot project will be asked to pay this fee of \$55 per semester. The University will then subsidize the rental.

Q: What would be different in the courses structured for laptops?

A: The possibilities are different depending on the discipline. Accounting students could perform data analysis in class, while design students could work on projects during a lecture. The laptop will also be used outside of the classroom to access faculty resources.

Q: Are classrooms currently set-up for this project?

A: There are some on campus, but more will be remodeled by the Fall.

Q: What has been the student reaction to this proposal?

A: The students felt that while technology is important, the University should not require it of all incoming freshmen, especially when many of them had already been accepted prior to this announcement. Other factors were a lack of infrastructure for that many students, financial aid questions that could not be answered, and the lack of faculty training. While students did not support the first proposal, they are very in favor of this pilot project.

Q: Will Duluth expand this project next year or wait?

A: Duluth will continue to evaluate whether to proceed with a laptop initiative that includes all students and when this could be implemented. In the meantime, Duluth will attempt to expand the pilot project to other programs in Fall 2000 once infrastructure and faculty training is done to the satisfaction of the students. Hopefully, in a few years both faculty, students, and the campus will be ready.

Q: Are there hardware and software standards? If so, what are they and who sets these?

A: The Department of Information Technology at Duluth has developed a set of recommended solutions, which was then reviewed by the campus governance committee. It is a broad set of solutions. An RFP will then be used for the pilot project.

Q: Will students be responsible for buying software for the laptops?

A: For the pilot project, the student cost will be limited to \$55 per semester. All other costs will be absorbed by the University.

Q: What are the future plans for funding?

A: No final decision has been made. Basic costs, such as software, will be built into the RFP. More specialized software would continue to be put on a server.

Q: What benefits are to be expected?

A: One benefit is interactive learning by the faculty and students as opposed to faculty just teaching course material. Students will also be more technologically competent and computer literate. This is a benefit to every major. Crookston students that were talked to enjoyed the laptops and used them in ways that Duluth students had never thought of. Use also changes when students are given their own computer versus sharing one in a lab environment. To track benefits, an assessment will be developed and administered to both faculty and students.

Q: Did Duluth discuss putting computers in classrooms instead of issuing laptops?

A: It was discussed but Duluth decided that by issuing laptops, technology will accompany the faculty and students wherever they go.

Bill Peterson, from Crookston, said that he supported the statements made today as well as the effort underway at Duluth. He then offered his assistance to Duluth.

Q: The trend today is towards leasing computers, instead of purchasing, so that they can be upgraded. Is this what Duluth is considering?

A: Duluth is looking at leasing. One problem is the cost, which has been estimated at \$900-1,000 per year, although this figure does include the hardware, software, insurance, infrastructure, and repairs.

Q: Will a uniform platform be used in the pilot project?

A: This will be discussed with the 3 departments, but Duluth is hoping for one platform. If one platform does not work, then this will be an opportunity to look at different options.

Q: Will Duluth's technical service department be accepting responsibility for support of the laptops?

A: The plan is to include some support in the RFP. Duluth is hoping that on-site support would be provided by the Duluth staff, and difficult problems would be shipped back to the manufacturer.

Vince Magnuson then asked how many laptop pilot projects are in place on the Twin Cities campus and if there would be more in place by Fall 1999.

The committee responded that there are probably a few projects, but nothing is tracked centrally. As for more projects by Fall, no one knows for sure. Some colleges, such as IT, would never institute this project since IT students need workstations with large monitors. SCIT has discussed this in the past, but since multiple platforms would be needed, it would not be a feasible project.

In closing, Professor Gini asked that results from the pilot project be shared with the committee, especially if an improved educational outcome could be demonstrated.

### **3. OTHER BUSINESS**

Professor Gini introduced Professor Laura Gurak, since she was appointed in July, but on leave Fall Quarter.

This committee discussed how laptop decisions are made on the Twin Cities campus and made the following comments:

- Decisions seem to be made at the departmental level
- Who tracks evaluations? What methods are being used?
- Should the committee recommend that the University fund more technology in classrooms? If so, what kind of technology?
- Some high schools now issue laptops. Do students entering the University then expect it?
- Funding will always be an issue

The committee then discussed the following agenda items for the rest of the year:

- Biennial Request, ask Bob Kvavik to give a presentation on the technology piece
- PeopleSoft Project in respect to entering student grades and system integrity, ask Barb Merrill to discuss public key infrastructure, security, and vendors
- Evaluative methods for course benefits

Professor Gini thanked everyone for coming and adjourned the meeting at 1:00 p.m.

Rebecca Hippert  
University Senate