

# On Line

**The president of Kentucky's Morehead State University has found a new way to communicate with the campus—through voice mail.**

Ronald G. Eaglin has left one-minute pep talks for students and faculty members each week since the fall semester began.

His subjects have included tips for students on doing better academically and reminders of upcoming events or exams. In one message, he encouraged students to register to vote. "I'm not worried about running out of things to say," Dr. Eaglin notes.

He says the messages have had a positive impact. For example, officials responsible for tutoring assistance at the university saw a 37-per-cent increase in demand after the president mentioned the service in one of his voice-mail notes.

Dr. Eaglin, who has been at Morehead for four years, thinks that the messages have improved his relations with students. "When I see students around campus, they sometimes wave," he says. "I feel more connected to them now."

The idea of using telephone messages was suggested during a retreat for administrators and faculty members as a way of improving communications between the president and professors.

Dr. Eaglin decided to direct a portion of each message to students, as well, when he learned that it wasn't technically feasible to separate the telephone numbers of faculty members from those of the 3,000 students who live on the

## Information Technology

### Computing Officials at 34 Universities Seek to Create a Network for Higher Education

'Internet II' would be much faster than the Internet, where delays frustrate many academics

BY THOMAS J. DELOUGHRY

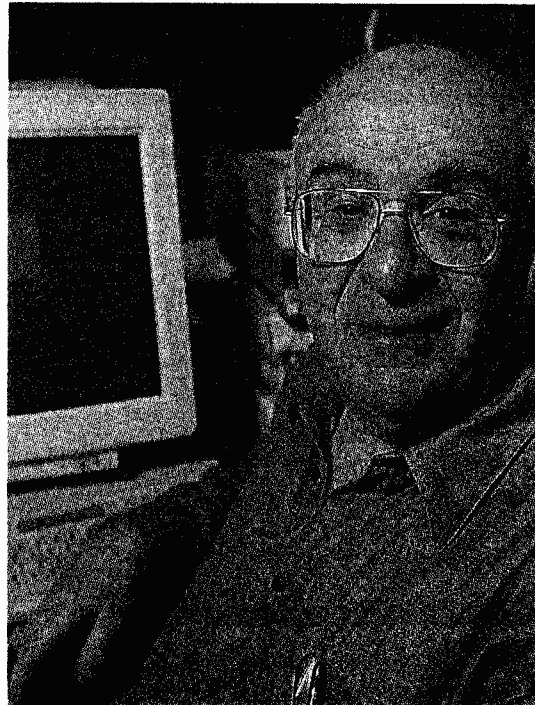
**T**OP computing authorities at 34 research universities agreed last week to help create a national network for higher education that would be several times as fast as the Internet.

The effort, dubbed Internet II, was launched amid concerns on many campuses about bottlenecks on the current Internet and fears that the network will not evolve quickly enough to serve the universities' future needs.

Details of the project are still being worked out, but organizers said Internet II would provide professors and students at research universities with reliable, high-speed service and make it possible for technologists to develop the systems for distance learning, digital libraries, and on-line collaborative research that colleges say they need.

Its organizers anticipate that advances made on the new network will ultimately become available on the regular Internet as it is upgraded.

A new organization, which the research universities have agreed to establish and finance with membership fees, would help to facilitate the cre-



JAY GORODETZER FOR THE CHRONICLE

*David Farber of the University of Pennsylvania says that a number of companies—not just one—should be involved in the development of "Internet II."*

issued a contract for the operation of the NSFNET, which served as the Internet's "backbone" until the network was privatized in 1995.

Giving a contract to a single company for Internet II would mean that the network would not evolve as quickly as if a number of companies were involved and testing their latest technologies, he said. "If you go competitive in the first place, I think you get a better deal out of it," he said.

#### A PUSH FOR DECENTRALIZATION

Several other organizers of Internet II agreed with Dr. Farber and said they expected the new network to be operated in a decentralized fashion. A number of telecommunications companies will be involved, they predicted, and most of the federal funds will be in the form of small grants to individual universities that will be used to connect the campuses to the network.

"As President Clinton likes to say, the era of big government is over," said Chicago's Dr. Jackson.

Michael Roberts, a vice-president of Educom who has participated in the

campus.

**A Philadelphia consultant, meanwhile, thinks that voice mail can be used to allow alumni to hold virtual "reunions" on the telephone.**

John N. Craig, who specializes in planning conferences for small groups, hasn't persuaded any colleges to test his idea, but he says some are interested in it.

He proposes that alumni participating in a virtual reunion be able to leave messages for fellow graduates to retrieve. The reunion could last for several weeks and would probably work better for small groups of alumni, such as members of a sports team or fraternity, than for a large class, he says.

Mr. Craig says a voice-mail reunion would be more convenient and affordable than the traditional version because it would eliminate travel and lodging costs. His model is also better than an e-mail reunion, he adds, because not everyone is on the Internet, while "everybody has a telephone."

But are alumni willing to sacrifice nostalgia-filled visits to their alma mater for several weeks worth of telephone messages? Mr. Craig points out that the voice-mail system shouldn't necessarily replace gatherings altogether, but that it would "give people who couldn't come to a reunion an opportunity to participate anyway."

ation of the network. Its backers expect as many as 100 institutions to join the effort. Membership fees will be determined by the number of participants.

Internet II also would be supported by corporate partners in the computer and telecommunications industries, as well as with federal funds that the organizers hope to attract.

#### **KEEPING UNIVERSITIES 'VITAL'**

The decision to move forward with the plan was made during a meeting in Chicago last week of campus technology officers. People from Pennsylvania State and Stanford Universities and the Universities of California, Chicago, Michigan, and North Carolina will play leading roles in the network's development.

"This will let us do things that we have to do that we couldn't do otherwise," said Gregory A. Jackson, associate provost for information technology at Chicago. Several institutions have established or are planning high-speed regional networks, he said, but a network with national reach would be out of the question without this kind of collaborative effort.

"This will help to keep the universities vital," said Lawrence Landweber, a professor of computer science at the University of Wisconsin at Madison who had been involved in the planning process. "It will help us look at the next generation of applications that will roll out in the commercial market in 5 or 10 years."

Important questions remain about the structure of the new network and the roles of various participants. Chief among them

is the question of how prominent the federal government should be in Internet II.

Some computing administrators, such as Ira Fuchs of Princeton University, believe that the National Science Foundation must play a central role. "Some organization has to be in place, the N.S.F. or something similar, that has the ability to make decisions that ultimately need to be made," he said. "And generally that organization is also the one that holds the purse strings."

Others familiar with plans for Internet II counseled caution and urged college officials to limit the government's role.

David Farber, a professor of telecommunications at the University of Pennsylvania, said it would be a matter of the footsteps taken in 1986

talks among campus computing officials, emphasized that colleges would not be building any networks on their own and hoped to involve as many communications companies as possible in the project. Educom is a consortium of nearly 600 colleges and 100 companies that promote computing in higher education. "The challenge here is not to invent it, but to integrate it," he said.

In other ways, however, the organizers said they believed the analogy of the NSFNET was a good one for Internet II. They said they hoped the new project would spark the kind of interest and investment in networking and in new applications that the NSFNET is widely credited with prompting.

#### **Participants in the**

Arizona State University  
California State University S  
Carnegie Mellon University  
Case Western Reserve Unive  
Colorado State University  
Cornell University  
George Washington Universi  
Harvard University  
Indiana University  
Massachusetts Institute  
of Technology  
Michigan State University  
Northwestern University  
Ohio State University  
Pennsylvania State Universit  
Princeton University  
Purdue University  
Stanford University