ACUTA eNews March 1995, Vol. 24, No. 3
Maintaining balance in a technological upheaval

David L. Smullen
Director, Information Technology Services
Hamilton College

Tradition, as Tevye reminds us in the musical Fiddler on the Roof, is a powerful force that helps us to maintain a sense of balance in the face of dramatic change. Hamilton College is a traditional residential liberal arts college, which cherishes academic excellence and close faculty-student interaction. In the last five years Hamilton has experienced dramatic change in its use of information technology resources, and is now putting in place a modern infrastructure that will enhance its most important traditions while preparing students for a lifetime of learning in the twenty-first century.

Existing Infrastructure

In 1985, the College installed a new copper plant for academic and administrative buildings and a Rolm CBX 8000. No fiber or coaxial cable was installed at that time. The residence halls had been wired for voice by New York Telephone in the 1960s, and student telephone service is now provided using Intellipath (digital Centrex) from NYNEX. It should be noted that Hamilton did not have steam tunnels, or any in-ground conduit system and the copper plant was, for the most part, direct buried. In addition to telephone services, the Rolm switch provides asynchronous terminal-host connections for over 150 faculty and staff. By 1994 the data capacity of the Rolm switch was nearly exhausted.

In 1991, Hamilton installed a seventy-meter ethernet backbone and two UNIX servers, one to support an integrated package for administrative offices, and the second as a gateway to its Internet connection. The TCP/IP protocol suite was chosen as the primary interconnection standard. In the following two years, numerous AppleTalk networks, and two ethernet classrooms were created for MS-DOS machines and Macintoshes, and a T1 link, using existing copper wiring, was set up to connect two buildings on campus.

New Infrastructure

To maximize the benefits of a networked campus, communications links must extend everywhere.

See "Hamilton..." on page 7

Call for nominations for ’95-’96 Board of Directors

Pat Searles
ACUTA Immediate Past President
Cornell University

Each year at this time the Chair of the Nominating Committee issues the call for those who would serve on the Association’s Board of Directors. This year, four positions must be filled from the ranks of our members: President Elect, Secretary/Treasurer, and two Directors-at-Large.

According to Association bylaws, current President Randy Collett, Central Missouri State, will become the Immediate Past President, and President Elect Dave O’Neill of Washington State will assume the position of President for 1995-96.

Completing the transition begun last year to the new bylaws, nominations will be accepted for the following positions:

- President Elect: As stated in the Association bylaws in Article III, Section A6, “Candidates for the office of President Elect must have served as a member of the Board of Directors for a minimum of one year, or served as the Chair of a Permanent Committee for a minimum of one year.” Nominees for this position must be prepared to serve the following two years as President and Immediate Past President.

- Secretary/Treasurer: This is a one-year position. Since the Secretary/Treasurer may serve two consecutive terms, Jim Cross of Michigan

See "Nominations..." on page 4
Board Report

ACUTA Board approves financial reserve fund policy

The ACUTA Board approved a financial reserve fund policy to maintain an amount equal to a minimum of six months’ operating expenses in reserve. A minimum of 66% of the reserve funds must be in the form of cash or securities readily convertible to cash, consistent with the Association’s approved investment policy. A maximum of 34% of the reserve funds may be in the form of equity in the Association’s headquarters building. The Board also directed that a plan be developed by the Secretary/Treasurer, in consultation with the Executive Director, to achieve the stated amount of the reserves by the end of the 1997-98 fiscal year.

Other items on the agenda included:
- Maui seminar update
- FY ’95–’96 ACUTA budget development calendar
- Policies on audit frequency
- Electronic access project hardware-software recommendations
- Nomination/Election policy
- Administrative Secretary position requirement
- Bylaws and Policy/Procedure Manual revision
- Update on selection of appointed Director-at-large
- Committee reports

Submitted by
Dr. James Cross, Michigan Tech
ACUTA Secretary/Treasurer

Host needed for Annual Conference in Orlando

Recognizing that ACUTA is a volunteer-driven organization, every attempt is made to increase the number of our members who participate in the functions of the Association. Accordingly, at each ACUTA event, institutional members are given the opportunity to act as “hosts.”

The responsibility of the host school is primarily to familiarize attendees and their families or guests with the location of the event, providing information about the immediate area and local points of interest. To accomplish this, the host school staffs a greeting booth or table at the Sunday evening reception and during coffee breaks at the Conference or Seminar. Some hosts have held drawings for mugs, T-shirts, and other campus-related items as prizes for those who come by the booth and register.

In addition to the duties during the Conference, the host also works with the ACUTA staff to prepare two letters, one to be sent to potential attendees and a “welcome” letter for attendees.

The Board has authorized one complimentary registration to the event for which a school serves as a host.

If you would be interested in serving as host at the Annual Conference in Orlando in July, please contact Lisa Cheshire in the ACUTA office by Monday, March 27.

Quoteworthy

“The problem that presidents face at most institutions is not how to help the institution grow but how to help it shrink, which is a very different and much more difficult problem,” says the former president of the Association of American Universities.

(Wall Street Journal 12/1/94 B1)

Association of College and University Telecommunications Administrators
ACUTA NEWS, Volume 24, No. 3

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ACUTA News is printed on 15% post consumer waste recycled paper.
On page one of this issue of the ACUTA News, you will find our annual announcement of nominations. This is always an exciting time, because the leadership of our Association is one of the most important decisions that the membership makes.

ACUTA is like hundreds of other associations when it comes to elections. Individuals are nominated who are considered by their peers to be leaders in our profession/industry. They indicate a willingness to serve the Association in a leadership role because they are committed to the goals of the Association, and the result is the continued success of the organization in meeting those goals. An article I read recently described association officers as “guardians of the soul of the organization.”

But the individual experiences growth as well, so it seems significant to ask, “What is leadership?”

A couple of months ago, I had the opportunity to hear former British Prime Minister Margaret Thatcher speak on leadership. As the first in a distinguished-speakers series, Lady Thatcher declared that in order to be successful, leaders must have vision, and “vision must be based on principles that will endure for all time.”

Remarking that “You cannot have freedom without responsibility,” she enumerated three simple principles of leadership:

1. The unexpected does happen. And you should always be prepared for it even though you don’t know what it will be.
2. The art of leadership is that of making the impossible happen.

3. Read and learn the lessons of history so that you don’t repeat its mistakes.

We work in an industry that offers us plenty of potential for both experiencing and implementing the “impossible.” And certainly, as this technology changes and matures, we have more than our share of the “unexpected.”

ACUTA depends on its volunteer leaders. If we are to be the top flight association that we strive to be, we need a strong cadre of competent voices in leadership roles. Many of you are already in leadership roles on your campuses. And I dare say, your campuses benefit from your experience and expertise.

I don’t think there’s any question that the participation of our members is at an all-time high. Volunteers are serving as both chairs and members of six active committees. Yet, in terms of governing the Association, we rely on the elected Board of Directors.

As we implemented the new governance structure one year ago, one of the biggest discussion items was the process of infusing new voices to the leadership of the organization. We were mindful of time and resource commitments when we made decisions about the size of the Board and terms of office. In short, we wanted to be more “member friendly.”

ACUTA continues to evolve and mature. We have made a strong commitment to remain volunteer driven. We rely on the strength of our membership and its elected governing board. The election process is a crucial element of that process. Think about that as you read the announcement about nominations. We need your help!

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**Spring Seminars**

**The Video Highway:** Can We Get There from Here?

First voice, then data, now...video.

This dual-track Spring Seminar (Technical and Management tracks) will focus on technology definitions, implementation requirements, application of the technology in higher education, and the fundamental cultural changes required to accept the new paradigms.

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Save $50

Register by March 17

Call Kellie Bowman

(606) 278-3338 for details

**Kansas City, Missouri**

April 9–12

Hyatt Regency
Shannon Campbell joins ACUTA staff

When you call ACUTA headquarters now, you may hear a new voice. Shannon Campbell joined the ACUTA staff as Administrative Secretary February 27. Shannon will greet you pleasantly and answer your questions, or forward your call to someone else on staff who can if she doesn’t know the answer herself. In addition, she’ll handle routine office tasks as we work together to serve you better.

“Considering the exponential growth of the telecom industry in recent years, ACUTA has positioned itself as a dependable resource for telecom managers who face new challenges everyday on campuses all over the world,” remarked Jeri Semer, Executive Director. “Our two new additions to the ACUTA staff, Shannon and Aaron, will help us to anticipate the needs of the membership in the future as well as improve the level of service as we respond to the kinds of requests we’ve always handled.”

Shannon has nine years of experience in a variety of positions with a local bank where she acquired valuable computer skills and honed her natural tendency as an organizer. She looks forward to working in a smaller office where, in her words, “there seems to be a team-like attitude toward getting work accomplished.”

Shannon’s hobbies include reading (mysteries are her favorite genre) and drawing (you may see her cartoons in ACUTA publications sometime!). She has spent her whole life in the Bluegrass area, so she’s Kentucky clear through!

Shannon is looking forward to meeting ACUTA members—at least over the phone if not in person. “I always try to do the best job I can,” she says. “I like for people to think of me as someone who can get the job done.”

Welcome Shannon next time you call ACUTA!

Nominations...

Continued from page 1

Technological University is eligible to run for re-election if he chooses.

- Two Directors-at-Large The Nominating Committee will assemble a slate of nominees from the names submitted by the membership. The two candidates receiving the most votes will be declared the winners. Bruce McCormack, Brock University, and Tony Mordosky, Millersville University, whose Director-at-Large terms expire this year, may choose to run for re-election. In addition, one Director-at-Large position will be appointed by ’95-’96 President Dave O’Neill, subject to approval by the Board.

Two other Directors-at-Large, Linda Bogden-Stubbs of SUNY Health Science Center and Buck Bayliff, Wake Forest University, will complete the second year of their two-year terms in July of 1996.

Nominations

Any Institutional ACUTA member may submit nominations for the offices of President Elect, Secretary/Treasurer, and Director-at-Large. Before placing a name in nomination, please be reasonably sure that the person you are nominating is willing to accept the responsibilities that accompany the office. The individual should be aware of the considerable commitment, particularly in terms of the time required to carry out the responsibilities of the office. The individual’s institution also must be prepared to support such a commitment.

In Article III, Sections A2 and B2, the bylaws stipulate that all officers and Directors-at-Large must be primary or associate representatives of an Institutional Member.

Nominees will be contacted personally to discuss the duties and responsibilities associated with the position and their ability to fulfill those obligations, and to answer questions the nominee may have. All nominations must be received by 5:00 p.m., CDT, April 3, 1995. Send all nominations to: Patricia Searles, Chair, ACUTA Nominating Committee, Cornell Univ., 200 Computing & Communications Ctr., Ithaca, NY 14853-2601. Fax: 607-255-8761; e-mail: pas2@cornell.edu.

Phone nominations cannot be accepted.

Once again, all elections will be done by mail ballot to enable all voting members an opportunity to participate in the selection of leaders for our Association.

Discount on Telecommunications Reports

Through a special arrangement with the publishers of Telecommunications Reports, ACUTA members will receive a discount on this excellent publication. Institutional members will receive a $50 discount off the education/government rate, which is regularly $695. Corporate affiliates will receive a $100 discount off the regular $995 price.

Telecommunications Reports is an excellent source of information on current regulatory issues, and industry developments and trends. To subscribe, call (800) 822-6338 or (202) 842-0520. Be sure to mention ACUTA. If you have questions, call Jeri Semer, ACUTA Exec. Dir., (606) 278-3338.
Several courts have indicated that the part of the Cable TV Act that bars the telephone company from offering video dial-tone (VDT) in its local service area is unconstitutional. The FCC has issued the fourth further rulemaking notice on the docket 87-266 VDT proceeding... Comments were due by March 6 and replies are due by March 21 (Telecommunications Reports 1/16, 1/30, 2/13, 2/20). Several urban areas have been authorized to begin trials of this technology. What effect it may have on ACUTA members is open for speculation. All of us could see major changes as these services become available in the next few years.

The FCC is considering nearly doubling regulatory fees in the near future (TR 1/23 & 2/21). They are expecting to increase fees from about $60 million last year to over $116 million this year. Comments on the fee proposal were extensive and very negative. Almost all indicate that it will be the end user who will have to pay the added costs if the FCC carries out this plan. Some of this increase will apply to IXCs and to resellers so ACUTA members may be involved.

S.314, entered in the Senate by Mr. Exon, is to be called the Communications Decency Act of 1995. This bill will modify the Communications Act of 1934 with regard to obscene and harassing use of telecommunications facilities. The bill proposes things like replacing the term telephone with telecommunications device and uses language like “makes a telephone call or utilizes a telecommunications device, whether or not conversation or communications ensues, without disclosing his identity and intends to annoy, abuse, threaten, or harass any person at the called number or who receives the communication....” The fines for violation are doubled to $100,000 and prison terms go from 6 months to 2 years. It may turn out that this will apply to such things as Bulletin Board Services and other Internet type communications. If it does, then ACUTA member institutions will have to monitor all Internet usage very carefully. Liability could be a very big problem.

The telecom bill activity in the Senate is developing. As noted last month, Senator Pressler had circulated a 45-page outline of what he was considering. A few days later he hand-delivered an 82-page “discussion draft” to committee Democrats, leaders in the House, the Senate, and Vice President Gore asking for their comments by the next week (TR 2/6). The response was a 99-page document outlining the Democratic position. Senators Hollings (D) and Pressler (R) appear to be trying to work together to come up with a joint proposal to present as the new Senate Telecom Bill. Those with a vested interest (RHCs, IXCs, Cable TV) are all involved in the discussions and are proposing amendments to the bill while it is still in a draft status. (TR 2/20)

The supply of 800 numbers is rapidly running out. According to the Feb. 20 issue of 411, a new number is apt to show up early next year.

Maybe 888? Members need to watch developments and be ready to make the necessary changes to use the new number.

411 (2/6) mentioned that some places like Chicago, Miami, and Southern California are considering overlaying area codes. This seems to mean two area codes could both be active in the same geographic area. It may have been proposed with the idea that one could be for regular telephones and the other for cellular but it may end up that both codes are assigned to the same type of service in homes and/or businesses next door to each other. If this is the case, it may be necessary to dial 10 digits for all calls at some time in the near future.

Welcome New Members

Institutional Members
• Lewis University, Romeoville, IL. Edward C. Tennant, Jr., ph. (815) 838-0500, x533; Tier 2
• Queensland Univ. of Technology, Brisbane Old, Australia. Ross Gorham, ph. 61-7-864-1626; Tier 4
• Ramapo College of New Jersey, Mahwah, NJ. Manuel A. Villalonga, ph. (201) 529-7720. Tier 2

Corporate Affiliate
Copper Level
• Cognitronics Corp., Danbury, CT. Ken Brix, ph. (203) 830-3533

• FiberLink, Kirkland, WA. Bruce Allenbaugh, ph. (206) 803-8912
• Films, Inc., Chicago, IL. Jim Bilello, ph. (800) 323-4222 x222
• Homaco Inc., Chicago, IL. Gary A. Gunther, ph. (312) 384-5575

ACUTA membership is based on the enrollment of an institution as listed in the most current issue of the Higher Education Directory. Membership records are updated every two years. The difference may cause a school to move up to the next level of membership or, if enrollment has declined, a school may move down a level.

Notifications of any changes are being sent before invoices for 1995/96 dues are mailed in May. This will allow time to address any questions or concerns you may have. For more information, contact Kellie Bowman, Membership Services Coordinator, (606) 278-3338.
Grant brings Info Superhighway to Minnesota

Community access to the Information Superhighway will soon be available in 60 Minnesota counties, thanks to a U.S. Commerce Department grant. Gov. Arne Carlson announced recently that Minnesota will receive $425,000 from the National Telecommunications and Information Administration for a project called Access Minnesota.

The goal of the project, initiated by the University of Minnesota, Minnesota Extension Services (MES), and the Minnesota Department of Administration on behalf of a partnership of state organizations, is to narrow the gap between the technology haves and have-nots in the state. The grant will be used to establish "community routers" in 60 county seats, providing direct telecommunications connections to the Internet and the evolving National Information Infrastructure. In each location, a public access terminal in the MES office will be connected to the network, and extension staff or other community members will provide help in using the terminal. The ultimate goal is public access to the Internet for all 87 Minnesota counties.

The terminals, to be installed over the next 18 months, will be equipped with user-friendly tools such as Internet Gopher, software developed at the university that is now used by thousands of sites worldwide. The project will build on and extend the capabilities of MNet, Minnesota’s public sector backbone network serving state agencies, higher education, and local government.

“I am very proud of the strong partnership between state government and the University of Minnesota and the unprecedented collaboration with local government, the non-profit sector and the state’s other educational institutions,” said Carlson. “Access Minnesota will help move Minnesota to the telecommunications forefront.”

“People shouldn’t be shut out of the Information Age because they don’t have the money or because of where they live,” said Don Riley, the university’s associate vice president for information technology, who will coordinate the implementation of Access Minnesota. “In the same way we have roads that reach all corners of the state, Access Minnesota will help provide all Minnesota counties an on-ramp to the Information Superhighway.”

In addition to the federal grant, more than $1 million in matching funds was committed to the project by members of the partnership, including the university, MES, the Minnesota Department of Administration, State Information Policy Office, Minnesota Public Radio (MPR), Twin Cities Public Television, Dakota County, Minneapolis and St. Paul United Way, Northwest Minnesota Initiative Fund, Minnesota Department of Education, Technology and Information Educational Services, MRNet and Sci/Math Mn Inc.

Beyond the primary community access terminals, additional demonstration projects will connect 10 K-12 school districts and some public libraries. Community health and human services information will be provided over the network, and MPR and Twin Cities Public Television will offer dial-in access to their members.

Other educational institutions, government units and public libraries will be able to connect to the network. For more information, call Bill Bomash at MES, (612) 625-8776.

Information for this article was submitted by Don Riley, Associate Vice President for Academic Affairs at the University of Minnesota.

Show 'n' Tel-ecom was a big success at last year's Conference.

Show ’n’ Tel-ecom to be offered in Orlando

At last year’s Annual Conference ACUTA presented a new opportunity: the first annual ACUTA Show ‘n’ Tel-ecom—which we described as more than a conversation, less than a presentation. A sort of “mini exhibit hall” for campus projects.

Eleven schools participated in Anaheim, with displays and discussions on topics ranging from voice mail to fiber optics to partnerships. This year, college and university members are again invited to share experiences face-to-face with other members in an informal setting. Present a chronology of a successful project, discuss training materials, give the details of a TQM project, or just about anything else others could benefit from.

ACUTA will provide the room, tables, and easels to hang signs on. You bring your materials and a friendly smile!

Space is limited, so make plans today to participate in the second annual ACUTA Show ‘n’ Tel-ecom! More information and a registration form will be mailed soon.
The network, which must provide 24-hour access for everyone, has to adhere to widely used standards, and be able to incorporate new technologies as they become necessary and economical. Finally, given the small size of Hamilton's support staff, the network has to be managed economically.

The process of creating our new infrastructure began in the fall of 1993. Consultants studied our needs, designed the infrastructure, and prepared the RFP for the complete wire and fiber infrastructure and the electronics for the data network. We decided not to light up the video network until the needs in that area were more clearly defined, and the decision about acquiring another telephone switch was deferred until the spring of 1995.

The RFP, issued in July of 1994, called for the installation of over 2,500 "information outlets" in 50 buildings by September of 1995. Each outlet incorporates a four-pair level 3 UTP cable for voice, four-pair level 5 UTP cable for data, and an RG-6 coaxial cable for video. In each building, all wiring terminates in a single common location known as a communicore. Residence halls provide one information outlet for each student. Similarly, all office spaces, public spaces, and computer laboratories have information outlets.

The backbone design utilizes two distinct ethernets connected by an FDDI ring. The building electronics use 3COM secure stackable hubs, with Alantec Powerhubs for bridging and routing to the FDDI ring. Network management will be centralized and use SNMP software agents. Single and multimode fiber and coaxial cable are enclosed in a conduit system which provides fifty percent empty space for future growth.

The successful bidder began work in November. A mild first two months of the winter permitted about one-quarter of the outside work to be completed before the season's first major snowstorm. Simultaneously, intrabuilding work was started, and after two months 16 buildings were in various stages of completion. Internal work will continue throughout the academic year and summer.

Of course, building the network will be the easy part. Dealing with the variety of issues necessary to support the network once it is operational is a daunting task. We have created six committees, representing all campus constituencies, to help us resolve them. The committees deal with network standards, standards for interface boards, installation strategies, support and training, network services, and network policies. Several issues, such as standards for network interface boards, require resolution in the next two months so that we can inform prospective students. We are also participating in a variety of electronic discussion groups to learn from others who have dealt with these issues.

The future

Cables, wires, and conduits will not transform Hamilton's academic environment. However, this infrastructure will provide a foundation that will enable us to extend the reach of the academic program beyond the confines of the classroom, enhancing discussions that take place among students and faculty, and providing students with alternative approaches to learning while preparing them for a life of active citizenship.

The network will provide access to academic resources, such as the library and courseware, independent of the times that particular buildings are open. It will enable us to share resources in new ways, reducing our dependence on receiving information in print formats, enabling us to work cooperatively with other institutions, and ultimately permitting us to pursue new strategies that will reduce operating costs. Finally, it will enable us to communicate more effectively with prospective students and our alumni. The success of this venture will continue to keep the College's liberal arts tradition relevant in an increasingly technologically driven society.
An Introduction to U.S. Telecommunications Law


Here's a challenge: Try to find a telecom trade publication that does not in some way address the impact of law on the telecom industry. Now more than ever, knowledge of ever-changing telecom law is vital for every telecommunications professional. Burgeoning technologies, federal and state legislative initiatives, and judicial challenges combine to drive changes to telecom law. For example, the commercial introduction of Personal Communication System (PCS) technologies has prompted the FCC to reallocate scarce frequencies—and even auction them off to the highest bidder. Congress has been working on a complete rewrite of the Communications Act of 1934, which in part may unleash the Baby Bells into the dog-eat-dog interLATA long distance business. Bell Atlantic recently won a case heard by the 4th Circuit Court of Appeals to produce their own programming to carry on their common carrier video dialtone networks.

If all of this leaves you saying, "But my field is telecommunications, not law!," you need the kind of help provided by Charles Kennedy in An Introduction to U.S. Telecommunications Law.

Not only is telecom law changing rapidly, but the body of law is large and growing. Kennedy focuses the scope of his book by defining telecommunications as any electronic transmission of information chosen by the sender between specific places chosen by the sender. Included in the scope are local exchange and long distance services, pay telephones, operator services, paging services, cellular telephone, PCS, and satellite transmission services. Recognizing that the definition could apply in some cases to cable television and direct broadcast satellites, Kennedy limits his discussion of those technologies to the coming competition between cable television MSOs and the LECs. In keeping with the definition above, Mr. Kennedy does not address broadcast television and radio.

The book is organized into two major parts. The first part concentrates on the local exchange carriers and describes rate structuring, interconnections with other carriers, the MFJ, interconnection with data networks, customer premises equipment, the GTE consent decree, and video dialtone. In the second part of the book, Kennedy discusses the interexchange carriers, pay telephone and operator services, mobile telephone services, and domestic satellite carriers.

One of the book's greatest strengths is an extensive appendix dedicated to a discussion of competition, monopoly, and other economic issues. Kennedy's review of economic theory offers the reader a solid knowledge base and excellent perspective from which to judge future changes to telecom law. Specifically, he describes in great detail the dynamic tension between capitalistic competition and the need for regulated monopolies to insure a public good, such as universal telephone service. As Kennedy explains, it is this constant tension that produces the various statutes and regulations that make up the body of telecommunications law. Ultimately, a monopoly (and concomitant regulations) serves merely as a transition to a time when technology has evolved sufficiently or other economic events have occurred to enable true competition.

An Introduction to U.S. Telecommunications Law is concise, very readable, and suited for both novices and readers already familiar with current law. (It's so current, in fact, that he references the ill-fated TCI/Bell Atlantic merger.) I highly recommend this book.

Thanks to Terry Robb, Manager of Telecommunications at University of Missouri, Columbia for this review.

ACUTA Events Calendar

Spring Seminar
Kansas City, Missouri
April 9-12, 1995
Hyatt Regency

TOPIC
The Video Highway: Can We Get There from Here?

24th ANNUAL CONFERENCE
Orlando, Florida
July 16-20, 1995
Stouffer Resort

Fall Seminar
Fort Worth, Texas
Oct. 29-Nov. 1, 1995
The Worthington Hotel

TOPICS
• Feature Speakers
• Breakout Sessions
• User Groups • Exhibits

Winter Seminar
Phoenix, Arizona
Jan. 21-24, 1996
Sheraton San Marcos

TOPIC
To be announced
Maine Education Network approved

From the Chronicle of Higher Education (2/3/95) we learn that the Education Network of Maine may seek accreditation, trustees of the University of Maine voted recently. The network currently delivers eight degree programs via a combination of voice, video, and computer links to students at off-campus locations, but all degrees are granted by participating institutions. The Education Network wishes to grant the degrees itself.

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Telecom news on the Internet

Telematrix has announced a new service geared for telecom managers. The International Telecom Center (ITC) is a new point of access on the Internet dedicated to providing late-breaking information on telecommunications from around the world.

Telematrix describes ITC as an electronic meeting point that supplies users with telecom-oriented news, products, goods, and services including:

- World-wide Calendar of telecom events
- Demo Board, offering free downloads of software demos
- Product Board, providing users with continually updated information on telecom products from over 1900 international telecom vendors
- Printed Word, providing information on a wide variety of telecom journals, books, magazines, and newsletters
- Telecom Tips, tricks and techniques to help users reduce their current communications costs
- Education Alliance, offering assistance in the form of a comprehensive, continually updated listing of education and training resources
- Telecom and Government, supplying the latest info concerning government-related issues
- Help, delivering a catalog of consultants, associations, databases, and more from the field of telecommunications.

ITC is available 24 hours a day with no charge for accessing, browsing, or downloading any of its materials. ITC is a fully interactive facility that offers full-color graphics, sound, and video for those using World Wide Web.

Access ITC on the Internet at these addresses:

- World Wide Web http://www.telematrix.com
- Gopher gopher.telematrix.com
- Telnet telematrix.com

For more information, contact Gregory Johnson at (914) 353-0331 or e-mail greg@telematrix.com.

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“Virtual Supercomputer”

The National Scalable Cluster Project will enable computer users to benefit from the combined computing power of many machines working together in various locations on a specific problem. The $4-million project is a collaborative effort, funded by NSF, between the University of Illinois at Chicago, the University of Pennsylvania, and the University of Maryland at College Park. The result will be a kind of “virtual supercomputer,” harnessing a portion of the horsepower of many computers linked around the world. “The Internet is an information highway, and we’re going to try to transition it to a computing highway,” says one of the project’s participants. (Chronicle of Higher Education 11/23/94)

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AT&T sponsors distance learning project

According to the Chronicle of Higher Education (2/24/95), “the AT&T Foundation gave Pennsylvania State University $300,000 toward technology training and developing enthusiasm among professors for distance learning. The university will team professors up with experts in computer and multimedia technology to adapt course material for presentation over interactive television or computer systems.” The project’s goal is to “develop a pedagogy related to distance education,” says Penn State’s Vice President and Dean for continuing and distance education. Two historically Black institutions also will take part in the program, to determine strategies for smaller institutions and diverse student populations, according to the Chronicle.

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Voice conversations over Internet

“The convergence between telecommunications and the computer industry will accelerate this week with the arrival of audio-compression technology that lets users make long-distance ‘phone calls’ across the Internet for the cost of a local call,” begins an article in PCWeek (2/13/95). VocalTec Inc., has introduced a product called Internet Phone, a communications package that transports voice packets in real time and allows users to conduct voice conversations over the Internet anywhere in the world. Aside from the obvious security and bandwidth issues, the technology involved can’t rival phone lines for quality—yet.

Internet Phone works with any Winsock-compliant application over connections ranging from a 14.4K-bps SLIP line to a dedicated T-3 line and costs a mere $49.
TCI and Reuters plan multimedia via cable for schools

Tele-Communications Inc. and Reuters’ NewMedia Inc. have formed a joint venture called Ingenius to deliver multimedia software to schools via cable TV. The software, called “What On Earth,” comprises six news stories selected from around the world in a format that combines photographs, text, video, sound and graphics. Students will be able to click on highlighted words to bring up news clips, glossary definitions and sound bites. The cost is $100 per computer per year for schools and $150 per year for home users. (Source: Investor’s Business Daily 2/13/95 via EDUPAGE)

Who’s online?

Of the estimated 30 million Internet users, only about 10% could be considered consumers, according to Online Access (Feb. ’95). The other 26-27 million are institutional users from academia, business, and government. A survey by FIND/SVP shows 31% of those who access the Internet from home are self-employed professionals, and 41% are white collar professionals who bring work home.

How wired is K–12? Citing the U.S. Department of Education, Broadcasting & Cable (2/13/95) reports that only one-third of the nation’s public schools have access to the Internet. However, 75% have computers, 74% have cable TV, and 70% have broadcast TV.

New wireless products

The Wall Street Journal (2/3/95) describes a number of soon-to-be-released wireless products, including one that will allow you to use your credit card to pay a traveling salesperson or a sidewalk vendor. Some others: Personal Handyphone from Panasonic, that lets two workers in the same building talk with each other over special headsets while simultaneously using wireless laptop computers; a service from Motorola that automatically tracks a roving user at home, at work, or while commuting; and Toshiba’s wireless navigational system which sends signals to three circling satellites that pinpoint the location of a vehicle and report its progress on a street map displayed on the automobile’s color monitor.

Network security

“...not connecting to the Internet or erecting a big firewall is not the whole answer. Look in the mirror before looking out the window.”

—Scott Bradner, Network World, 2/6/95

Send a photo via e-mail

According to Investor’s Business Daily (2/15/95), a new service soon to be available from Prodigy will allow users to send pictures and voice recordings as part of e-mail messages. “We think there’s a huge market with multimedia electronic mail services,” says a Prodigy spokesman. The service will be offered in conjunction with unnamed major film-processing centers, which will take a roll of film and convert it to a floppy disk suitable for e-mailing.

Computer, Just do it!

Information Week (2/6/95) reports that McCaw Cellular subscribers soon will be able to dial into one number and, using everyday words and their normal voice, tell a computer to place phone calls, answer voice-mail, and keep track of reminders, using “electronic personal assistant” technology produced by Wildfire Communications Inc. According to the president of a telecommunications consulting firm, “This is breakthrough stuff. It’s as far beyond voice mail as the telephone is beyond the telegraph.” Future versions will integrate e-mail, fax, paging, and personal digital assistant technologies.

Cellular phone security

From the Wall Street Journal (2/3/95) via EDUPAGE: As part of a campaign to prevent cellular phone fraud, Cellular One of New York and New Jersey will now require new customers (as well as customers who have had their cellular numbers stolen) to dial a four-digit security code before placing calls. In 1994 cellular phone companies lost $482 million to fraud, or 3.7% of the industry’s $13 billion revenue for the same year. Most thieves use radio scanners to capture cellular phone IDs as they are transmitted through the air.

Book on Partnerships

A book entitled Delivering the Future: Cable and Education Partnerships for the Information Age has been published by Cable in the Classroom, the cable TV industry’s $300 million public service initiative to expand education opportunities. The book presents “case studies of innovative joint ventures schools and cable companies have entered into across the country to bring technology to students. Readers can review a variety of model programs they can replicate or adapt to meet communities’ needs,” according to Cable in the Classroom. Call (800) 743-5355 to order a copy or for more information.
Like any business, an association functions best when it has a plan. ACUTA's Board of Directors recognized this essential fact when it embarked, with member participation, on a strategic planning process in 1991. Based on member focus group research and a scan of the external environment, the Strategic Planning Committee and Board developed a mission statement and five goals. These goals are designed to provide a focus for ACUTA's annual planning and budgeting processes. Through the identification of these goals, the association agreed upon a general course of action that will guide the priorities and resources of ACUTA.

Members
Goal 1: Telecommunications departments will be recognized and respected by their institutions for their professional expertise and technological leadership in support of the institution's mission.

Association
Goal 2: ACUTA will be viewed as the organization of choice and advocate for college and university telecommunications professionals.

Access to Market-Driven Programs and Services
Goal 3: Members will have easy access to quality information, programs, services, and peer networking opportunities designed to meet their changing needs.

Goal 4: ACUTA programs and services will:
- Be responsive to changing trends in technology and their implications for higher education
- Relate the broad spectrum of telecommunications technologies to the higher education environment
- Incorporate leading-edge ideas and applications
- Address various experience levels
- Respond to the common self-interests and needs of members
- Address needs of various sizes of institutions
- Educate telecommunications professionals in telecommunications managerial and technical skills.

Industry Relations
Goal 5: ACUTA will be recognized by vendors as an influential and effective facilitator of collaboration and information exchange to develop and/or implement the effective application of telecommunications technology in partnership with educational institutions.

In developing the Strategic Plan, ACUTA's leaders recognized that it would not be effective sitting on a shelf. The Plan is a dynamic document, and must be periodically reviewed and updated to ensure that it remains consistent with the current environment.

Next month in Kansas City, the Board, staff and all committee chairs will meet in a two-day session to re-examine the Plan, and to identify strategies and action plans to help us meet our goals. They will be building upon the extensive work of the 1991-92 Strategic Planning Committee, and studying in depth the results of the 1994 Member Needs Survey, to ensure that any new strategies and action plans are responsive to member needs and concerns.

These action plans will form the basis for the 1995-96 committee assignments and budget, to ensure that ACUTA's human and financial resources are focused on activities that carry the plan forward to achievement of our goals.

A strategic plan can be compared to a road map—identifying both the destination and the route for getting there. Through ACUTA's strategic planning process, we seek to agree on the destinations, and encourage the Board, committees and staff to join forces and travel in the same direction.
Editor's Notes...
Some business and information shorts this month: Ameritech Corp. has requested FCC approval to offer a new 500-area code service that would allow users to keep the same number anytime they relocate. AT&T started providing the service in mid-December, but it's currently available to only 4% of the U.S. population. Coming soon to your local phone.... A Gartner Group study says employers measure the average productivity increase per telecommuter at 10%-16%, with an average savings in facility costs of $3,000-5,000 per telecommuter. The average work-time increase for telecommuters is two hours a day.... According to the Wall Street Journal (12/29/94), a professor at Eastern Illinois Univ. warned that companies may be held liable for employees' misuse of corporate e-mail systems, such as making defamatory remarks, because the network is considered a corporate asset.... Virginia's governor George Allen has ordered all games to be deleted from state-owned computers. The Tampa Tribune (1/9/95) cites a memo condemning game-playing as "nonproductive and inefficient," saying also that "time spent by employees playing such games should be considered an improper use of taxpayer funds." Hmmmm. Maybe they need a new software package called GameCop (Analytic Concepts, San Jose, CA) which monitors active windows on a PC to see if a game is running. A customizable message warns the employee to get back to work. It has an optional alarm to embarrass the user in front of the whole office.... According to Network World (2/6/95) we will run out of 800 telephone numbers by this time next year. The Industry Numbering Committee has proposed to set up a new toll-free area code with the number 888.... Call me with anything interesting. Pat Scott, (606) 278-3338; e-mail pscott00@ukcc.uky.edu.

Position Available

Telecom Switching Systems Engineer
Rockefeller University

Responsibilities: Implement, repair, & maintain voice communications system components of AT&T Definity G2.2 digital PBX, Merlin PBX Systems, & Mitel/SX-60 PBX. Manage hardware & software; monitor, test, & maintain eqpt.; cable plant maintenance, repairs, & installations. Maintain & implement voice, data, & video networks on copper, fiber, coax, & microwave. Maintain & implement changes in AT&T Audix & Callstar 1200 voice mail systems. Analyze all equipment & system failures. Report directly to Telecom Director.

Qualifications: BA/BS preferred. Extensive knowledge of large digital switching systems, data communications & complex networks. At least 3-5 years exp. with digital PBX & maintaining & installing telephone eqpt. Working knowledge of AT&T's Manager 2 & 3, inc. all system PROCs, Conversant, Audix, Trouble Tracker, & Monitor 1 is desirable. One yr exp. with AT&T Definity G2.2 & Merlin preferred. Knowledge of electronics & computer background desirable. Candidate should keep meticulous records & have excellent oral, written, & interpersonal skills.

To Apply: Send cover letter & resumé to: The Rockefeller Univ., Box 125, 1230 York Ave., New York, NY 10021

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