Telephone Exchange prepares University of Mississippi campus for 21st century

Buster Clark
University of Mississippi

In May 1994, University of Mississippi administrators decided to install a cable television system for the residence halls. At the time, the halls were receiving cable television from the local cable company, which provided only channels 2-13 with no premium services such as HBO, Cinemax, Showtime, etc. The task of installing the new system—along with instructions to make it state-of-the-art—was given to the Telephone Exchange, an auxiliary department reporting to the Associate Vice Chancellor of Computing and Information Systems.

Personnel in the Telephone Exchange had no experience in cable television, so they began researching what would be required to accomplish this task. Although it was a major undertaking, it didn’t take long to realize that we could install the cable television system. One of our telephone systems engineers and a network design specialist designed the system front to back. We wrote the bid specifications, constructed the engineering drawings, and bid the system. Peregrine Communications in Golden, Colorado, received the bid to install the satellite dishes and head-end equipment, as well as to balance the system. Telephone Exchange personnel were responsible for installing the outside fiber plant and connections in the rooms.

Fortunately, back in 1987, the University had incorporated the residence halls into the Dimension 2000 telephone switch. During this process, a conduit system with twisted-pair cable was installed, which provided access to 19 residence halls.

Salute to 1995 Institutional Excellence Award entrants

Jim Cross, Chair
ACUTA Institutional Excellence Award Committee
Michigan Technological University

ACUTA’s prestigious Institutional Excellence in Telecommunications Award recognizes innovative and exemplary telecommunications endeavors at member institutions. In 1995, two institutions were recipients of the award: University of Texas Medical Branch at Galveston and Connecticut State University System. (See story in last month’s ACUTA News.)

All of the entrants deserve congratulations for completion of telecommunications projects which have provided significant advantage to the institutions, faculty, staff, students, and outreach areas. The primary goals of the award are (1) to recognize campuses that have enhanced productivity, efficiency, excellence, and professionalism by successfully exploiting the potential of telecommunications, and (2) to share their success stories with other member institutions.

In addition to 1995’s award winners, the following institutions submitted entries in this competition. ACUTA commends them for their efforts:

**Agnes Scott College, Decatur, Georgia**
Karen Roy, Assistant Vice President for Finance Project: Information Technology Enhancement Program

The ITEP project included the installation of a fiber optic outside cable plant capable of supporting voice, data, and video; installation of a PBX; and implementation of an automated library system. Completion of the ITEP project has enabled the institution to streamline business practices, enhance teaching and learning, and improve modes of communications.

See "Institutional Excellence Awards..." on page 8
The November Board meeting took place at the Ft. Worth Fall Seminar. President Dave O'Neill and Program Committee Chair Jan Weller updated the Board on progress made in planning future ACUTA events. The Board listened as Jan described several new approaches to volunteer involvement with ACUTA, stressing the time required to plan and implement seminars and the annual conference is a large commitment for volunteers. President O'Neill asked the Board to review Jan’s report with a focus on program content, deliverables and results, and more use of professional staff to carry out the logistics of event coordination.

Other items on the agenda included:

- User Group evaluations
- Electronic Access Committee proposals
- Local Events Committee update
- Choosing Ponte Vedra Beach, Florida as the site of the Winter, 1997 Seminar
- Committee reports

Submitted by:
Anthony R. Tanzi, RCDD
Brown University
ACUTA Secretary/Treasurer

Directories to mail in December

The 1995-96 ACUTA Membership Directory will be mailed before the end of the year. We thank everyone who responded to our request for e-mail addresses; most of those were entered prior to press time. Please check your listing(s) and advise us immediately of any changes so that our records are accurate.

Association of College and University Telecommunications Administrators

ACUTA NEWS, Volume 24, No. 12

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ISDN—EZ

Integrated Services Digital Network (ISDN) will soon be as easy to order, set up, and use for the mass market as any other telecommunications service thanks to a number of key ISDN equipment manufacturers and telecommunications companies. Among those participating in the joint initiative are AT&T, Ameritech, BellSouth, NYNEX, Pacific Bell, Boca Research, IBM, Intel Corp., Motorola, and U.S. Robotics.

Their initial goal is to develop a few standard codes that would be easily identified by customers and highlighted in the documentation provided with the ISDN equipment the customer has purchased. These codes would represent one of the participating telephone companies a certain type and configuration of ISDN service. This ISDN equipment will be able to be tested for compatibility with these codes. Testing could be performed by switch vendors and service providers at their labs.

Many experts believe that the mass market is finally ready for ISDN service and expect an explosive growth in demand. They point to Internet access, work-at-home applications, high-speed video and data transmission, coupled with enhanced voice features, making ISDN the perfect solution for a wide variety of residence and business needs.

By focusing on a few standard codes that this consortium is supporting, customers would have the option of simply buying the ISDN equipment that offers the features and functionality they require, check the user’s manual for the ISDN code that the manufacturer recommends, and call the local and long distance service provider to order service using these codes. [Source: BellSouth Public Information Service, Atlanta, Georgia]
Impacts of Efficiencies

The issue of cost effectiveness for the technology we employ within our universities is not new. Many of us have traditionally used standard business models to determine our ability to employ new technology, upgrade infrastructure, or outsource specific tasks and functions. Cost reduction, return on investment, and full depreciation over some estimated useful life of the technology are measures that can be codified, rationalized, and memorialized for management. We've all done it and most of us have done it well enough generally to keep up with the latest and greatest. How many of us, however, have examined decisions based on efficiencies? Recent publications within our industry ranging from editorials to news articles and scholarly works have expressed the need to consider efficiencies.

Measures of efficiency require a more global view than most of us are accustomed to. They also assume a set of values beyond the basic business models we are most comfortable with. The technology we manage is used and applied by faculty, staff, and students for the accomplishment of their specific tasks—each one different, yet to the same end, that being the accomplishment of the institution's mission and within the environmental and social parameters established by that institution.

If, as in most institutions of higher education, some mix of teaching, research, and public service constitutes the basic fundamentals and if three quarters or more of the cost of providing these basic fundamentals is attributed to personnel, then measures of efficiency must include personnel costs. But this is indeed obvious. The approach, however, is not. Learning resources are ever more available and increasingly more accessible. Students, with increasing frequency, choose the time and pace at which they access these resources. Individualized courseware tailored to the student's needs and desires with timely and continuous assessment is becoming less visionary and more reality. Also, the learning environment is no longer bound by a traditional classroom or geographical location. The reconfiguration, consolidation, and migration of discipline related resources to geographical centers common in the past two decades as a result of the need for statewide or system wide efficiencies will continue to occur but now in cyberspace. No longer will there be the need for institutions to maintain a "critical mass" presence of any discipline on site. This restructuring in cyberspace now redefines the concepts of personal interaction, association, and alumni. The same is true for the traditional support services such as admissions, registration, grants and development, advising, financial aids, and fee payments. Many administrative tasks are increasingly being conducted electronically from remote locations with increasing cost effectiveness.

These changes may address cost effectiveness and productivity but not necessarily efficiencies. What role does the technology play in meeting the expectations established by the institution for environment and social interaction? Introduce the concept of efficiency and you now must address values. Which values become determinant and who establishes their priority? This speaks to the heart of an institution's mission and philosophy. How well are they understood and how widely are they embraced? Are rewards of employment or enrollment tethered to accomplishments contributing to these? The institution that truly uses efficiencies as a measure of its ability to apply technology will have broken out of the pack and the mundane traditionalism of higher education.

'til next month...
Cabling for the life of your network

Michael Longo
Technical Marketing Manager, Anixter

As your educational institution expands and changes in ways that create the need for new or remodeled facilities, a million details cry for attention: real estate issues, organizational issues, personnel, new equipment, and so on. Very often one of the details that gets delegated down too far is the communications cabling. It seems so basic—something that should always work—wire is wire—it shouldn’t need a lot of your time or attention. But it does.

Your communications cabling makes up the foundation of your information system. Just as it is important to make sure that your facility is built upon a foundation which will not shift, crack, or crumble, it is vital that your communications cabling be able to support a variety of applications and last for the life of your network.

One way to accomplish this is to install a structured cabling system that complies with established standards. The central standard that specifies a generic telecommunications cabling system is the ANSI/TIA/EIA-568-A, “Commercial Building Telecommunications Cabling Standard.” This standard specifies minimum requirements for telecommunications cabling within a commercial building, up to and including the telecommunications outlet/connector, and between buildings in a campus environment. A structured cabling system is broken down into six functional sub-systems: entrance facilities, equipment room, backbone cabling, telecommunications closet, horizontal cabling and the work area.

568-A also specifies that a structured cabling system use a star topology. Each work area outlet shall be connected to a cross-connect in the telecommunications closet. This brings all of the cables from a floor or area in a building back to one central point for administration. Each closet shall be star-wired back to the equipment room for the building.

Developing a structured cabling system requires that you choose the type of media to be used. 568-A recognizes three different media: Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP) and optical fiber cables.

UTP data cables and components can be classified into three different performance categories. Category 3 is rated for transmission frequencies up to 16 Megahertz (MHz). Category 4 cable and components are designed for frequencies ranging up to 20 MHz and can handle any Category 3 application and 16 Mbps Token Ring. The highest rated UTP system is Category 5, which is rated up to 100 MHz. Category 5 systems are designed to handle any copper-based application for voice, video, or data.

Shielded Twisted Pair systems were originally developed by IBM for use with their Token Ring systems and were rated up to 20 MHz. In fact, STP cables are commonly referred to as IBM Type 1. The 568-A standard now recognizes STP-A which extends testing of shielded systems through 300 MHz.

The highest performing structured cabling system available is based on fiber optics. Fiber optics use light pulses instead of electrical signals for transmitting information, which creates a number of advantages.

568-A recognizes the need for both data and voice communications. Therefore, a minimum of two ports per workstation is required. The first port must be supported by a 4-pair, 100 Ohm, UTP cable, Category 3 or higher. The second port needs to be supported by one of the following media depending upon present and future needs: a UTP cable (Category 5 recommended), STP, or a multimode optical fiber cable.

The 568-A standard also specifies a number of installation practices for each media type. Compliance with these rules will ensure the finished cabling system meets or exceeds the minimum performance requirements.

For horizontal cable runs from a telecommunications closet to a work area outlet, the maximum transmission distance for any media type is 295 feet (90 meters). An additional 33 feet (10 meters) is also allowed for patch cords both in the closet and the work area.

Designing and implementing a structured cabling system reduces downtime and long-term network infrastructure costs. An unstructured cabling system will cause up to 70 percent of a network’s downtime. Further, as technology progresses, an unstructured system will need replacement in a few short years. The ultimate goal of a structured cabling system is the ability to run anything, anywhere, at any time. The expected lifespan of such infrastructure is a minimum of 10 years.

As our communication networks become more complex, as more users share peripherals, as more mission-critical tasks are accomplished over our networks, and as the need for faster access to information increases, the necessity of a good foundation for our networks becomes increasingly important. The first step toward achieving the adaptability, flexibility, and longevity required of today’s networks begins with structured cabling.

Michael Longo has developed courses for teaching the basics of structured cabling.
Planning today may avoid panic tomorrow

Buck Bayliff
Wake Forest University

As we progress into our fiscal years, budget projections will soon be due for many of us. Thinking ahead, I wonder how I will construct my budget for the coming year and project for the years to follow.

I don’t want to be the bearer of bad news, but if you haven’t looked lately, college and university telecom operations are under attack by a new beast. It’s not enough to have to worry about the fare wars between the carriers that affect our bottom line. Or the small OCCs that offer our customers the moon to sign on with them. Or the 800 and 900 call issues. And, of course, there are always ingenious students who develop new ways to try to dial around or claim they didn’t connect or make that call.

The new line of attack can be broken down to two small but very significant words: Data and Internet. These two wonderful words have opened up the world to everyone for real time and on-demand information.

Don’t get me wrong—I enjoy surfing the Internet as much as anyone, and isn’t e-mail the greatest tool to come along in the last five years? (If you haven’t looked at the ACUTA homepage, please check it out.) But as I sit here using my university’s system—on a much smaller scale than my students—I ask the question...who pays?

Of course, the University pays a fee for Internet access. But have we—and you—had a budget update to meet the growing demand and expectations of access? When this educational tool first hit our campuses, there was just a small pool of folks with the expertise and the need to use it. But being the entrepreneurs that we are...well, just look at how this thing has grown.

Many of us now use “data and access” as marketing tools for our universities. Here at Wake Forest, as part of the tuition package, we now give students mobile computers and “free” access to the world. In keeping with the missions of our institutions, this wonderful tool helps to broaden the “real time” knowledge base of our students. But at what cost?

How many of us have seen our modem pools grow 100...200...400%? And who foots the bill for this? Telecom is approached because “We need you to help us meet the demand.” But this does not come without a cost. “Outsource it and be done” is not a viable solution. There are many hidden costs—not to mention control factors. Many IS departments are neither concerned nor have the means to charge back for service. It is just not their mission or function to meter service and charge for it. There also seems to be some lack of concern about whether the student is actually looking up educational material or just surfing the net and playing Doom. The tools are there to enhance the educational experience for our students. So we jump on board, and then what?

If you haven’t detected a shift of control and decision making, I challenge you to see for yourself the direction in which telecom departments are headed at warp speed. Will you be part of the decision making or an observer from the sidelines?

So we get over the issues of building and supporting modem pools; where does the next attack come from? As we market the use of Internet and e-mail, and see demands for access grow, and, yes, provide computers to our students, who is monitoring the types of traffic being conducted? Does your IS department care what kind of information the students are pushing over the pathways? Or are they just concerned that “we meet demand and provide the access?” How many of you send e-mail instead of calling these days? You are not alone; just look at what your students, their friends, and families are doing. One student said she gets about 30 e-mail messages a day. Do you charge for this traffic? And did this replace a phone call?

The “tech wizards” are now all excited about voice over the Internet. A recent issue of Business Communications Review had an article about International Internet Voice from a company at ten cents per minute. Do you get a cut of this income since you provide access to the Internet? Video teleconferencing on laptops via Internet is not “Buck Rogers” stuff.

Of course, I enjoy using and promoting technology as much as anyone. But, like you, I also have a revenue source to protect. Voice service as we know it today will not exist in the near future. How will we restructure our budgets to compensate for lost revenues? Can we structure new technologies to bring new revenue generating opportunities? We must look at how we operate and cost capture this service or we may see more than outsourcing of modem pools. I look forward to hearing your plans and sharing them with others.

ACUTA News ❖ December 1995
Retention efforts pay off for ACUTA

Kellie Bowman  
ACUTA Membership Development Manager

Look for your 1995–1996 ACUTA Membership Directory before the end of December. You’ll see lots of new names! The Membership Committee is pleased to report success in retaining 94% of school members as well as adding more than 80 new schools and companies. Enlisting the help of State/Province Coordinators for our annual retention campaign proved that personal contact by a peer institution is the most successful strategy for keeping members. Plans for expanded membership drives should make ACUTA’s 25th year one of our best! (Contact me if you know of someone who would benefit from ACUTA membership!)  
If you have questions about your membership or want to know more about volunteering for the Membership Committee, contact the office at 606-278-3338. We need your input!

Univ. of Mississippi...  
Continued from page 1

halls. Surplus conduits also were installed during that project, providing a foundation for part of what has developed at the University over the last eight years.  
This conduit provided ready access to the vicinity of all campus residence halls. Multi-mode and single-mode fiber optics cable was installed to each residence hall (single-mode for video and multi-mode for data). All installation, splicing, and terminating of the fiber optics cable was done by Telephone Exchange personnel.  
The department did not have sufficient personnel to install the connections in the rooms and maintain other day-to-day work on schedule, so we decided to hire temporary people to install the cable in the rooms. We took advantage of the opportunity to enhance other communications facilities in the rooms as well. We requested and received approval to install not only the RG-6 for cable television, but also two category-five jacks (for networking) and one category-three jack (for a telephone extension of the same number in the room). We hired a full-time, permanent Head-end Technician who reported to work two weeks after installation of the head-end equipment began.  
In August, 1995 the cable television system became active with a basic package consisting of channels 2–18 and premium services offered on channels 20–40. Premium services include Sci-Fi, Discovery, CMT, HBO, Cinemax, Showtime, and other popular channels offered in four tiers of service. Eight additional channels are set aside for academic use. Services can be activated or deactivated from the Telephone Exchange without requiring a technician to go to the residence hall.

Before July, 1995, the Telephone Exchange installed computer networks as departments had the funds, so many offices and buildings were without network services. Realizing the importance of having a networked campus, the administration provided funding to install a category-five network connection in every office, laboratory, and classroom that did not have one. This is appropriately called the Campus Network Project. Many of the same people used to install the cable television system are being used to install this network, which must be completed by July, 1996 or funding will be eliminated. Funding for the Network Project includes money to purchase eight Atomizers (small ATM switches) for the campus. With the installation of these Atomizers in early 1996, the campus will be using ATM as the transport for data on campus.  
In August, 1995, the decision was made to connect the residence halls to the campus fiber backbone. In order to accomplish this “Dorm Network Project,” additional equipment is being installed in each hall. When completed in June, 1996, the campus network will have added 4,455 possible connections to the backbone.  
During all this networking activity, Telephone Exchange personnel continued installing, splicing, and terminating the campus fiber backbone. In May, 1995, we completed the fiber backbone ring around the campus: a 36-count multi-mode ring with two sub-rings crossing the campus in critical areas to provide redundancy and point-to-point connections. Currently, all but twenty buildings are connected, and the remainder must be connected by July 1996. Single-mode fiber cable has been purchased to install on the backbone.  
These enhancements to the campus infrastructure are indicative of Telephone Exchange’s commitment to the future at the University of Mississippi and reflect the vital support and trust of the University administration.
Telecommunications Legislation

As noted last month, the House and Senate Conference Committee was officially formed on October 12 and 13 to consider the two telecommunications bills, HR 1555 and S 652. The "kickoff" meeting was held on October 25, and since then committee staff members have been meeting several times each week. Telecommunications Reports indicated in the November 6, 1995 issue that they plan to meet for ten-hour sessions on Nov. 6, 8, and 10, and for five-hour sessions on Nov. 7 and 9. This is just an example of one week's activity, and from all indications the pace continues at about that level. The lawmakers still want a compromise to send to the President before the year ends. So far the staff members are being very cautious and quiet about details of their discussions, at least from the point of view of an anonymous telephone industry source. The source also said "I've heard that negotiations are difficult and that everything comes with a price." Staff members are going through the two bills item by item, and from all indications there is a lot of discussion and progress is being made.

A group of business users and consumer interests who oppose the legislation have released a study by a Colorado consulting firm concluding that provisions extending pricing flexibility to local exchange carriers (LECs) could cost telephone ratepayers $14 billion (TR 11/6). The note does not indicate a timeframe over which this would be paid. The amount may vary a great deal by the time ACUTA members have to pay the bills, but we should all be concerned about the impact this legislation will have on us.

The nonprofit Twentieth Century Fund foundation released a study in mid October that challenges specific provisions as well as many of the underlying assumptions of the legislation (TR 10/30). A university communications professor edited the study and indicated that "the bills are heading precisely in the wrong direction." They are working toward "greater concentration of power, fairly rigid or closed networks, and higher rates" for communications services when they should be trying to develop a policy that will ensure the most flexible possible use of the advanced technologies that are available.

It is easy to see that the dust has not settled on the telecom issue as yet and may not settle for some time. Many factions are fighting for the life and future of the businesses they represent as they try to influence the direction taken by the committee.

Caller ID

The FCC issued an order on October 30, 1995 granting a delay of Caller ID blocking rules in some areas. In the earlier order there was a deadline of December 1, 1995 for implementing the blocking rules. In this new order hotel and motel lines and call return services are "stayed" until January 1, 1997 and for Centrex and Plexar lines the "stay" is until further notice. The university area is not mentioned and the term aggregator is not used in the order. So, at least for now, colleges and universities are not being specifically mentioned. However, the issue of dealing with Caller ID blocking rules through the PBX is still on the table at the FCC. In this order the following quotation applies to many ACUTA members. "Parties have persuasively argued that there should be symmetry in the application of our Caller ID rules to Centrex and Private Branch Exchange (PBX) systems. Application of Caller ID rules to PBX systems is being examined in the Third Notice. We therefore stay the effectiveness of Section 64.1601(b) as it applies to calls originated from Centrex and Plexar lines. An effective date for Centrex lines will be established in the order addressing the Third Notice matters."

The call return feature, *69, has caused problems with at least one university. Whenever someone tries to use the feature to return a call originally made from on campus, the call comes to the campus operator who has no idea who made the original call or where it came from. Some of those returning the calls have been abusive. The university has been working with the LEC trying to get a satisfactory resolution to the problem.

Video Dial Tone (VDT)

FCC Chairman Hundt has indicated that the Commission will wait for the House-Senate conference committee to finish work on the new telecom bill before the FCC will consider new rules involving VDT.

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Host school needed for Spring Seminar in Seattle

If you're a school in the state of Washington and you've been trying to come up with a way to get more involved in ACUTA activities, the Spring Seminar in Seattle (March 31-April 3) could be your opportunity! Host schools make a valuable contribution to ACUTA events, providing useful information about the surrounding area and generally making attendees aware of local attractions and opportunities.

The host school staffs a table at the Sunday evening reception and during coffee breaks on Monday and Tuesday. Some of our recent hosts have held drawings for mugs, umbrellas, and other items as prizes for those who come by and register.

The host also works with the ACUTA staff to produce two letters prior to the seminar. The Board provides one complimentary registration to the event for which a school serves as a host.

If you're interested in serving as a host in Seattle, contact Lisa Cheshire by December 22.
FRED fights fraud on university campus

Students at the University of Maryland who want to commit toll fraud on campus will first have to take it up with FRED.

FRED, which stands for Fraud Elimination Device, is the brainchild of Mark Katsouros, telecommunications automation specialist with the University.

The FRED application works with a PC-based tracking system to monitor and record calling patterns that have been defined by the system administrator as likely to indicate fraud is taking place. When these patterns occur, FRED calls the users, warns them that it knows what they are up to, and suggests they stop immediately.

If the caller doesn’t stop, FRED locates the system administrator, who can then talk directly to the caller. Katsouros said there has never been an instance where the potentially fraudulent activity went beyond that second call.

One of the situations FRED looks for is multiple calls from one phone attempting a number of erroneous access codes or PINs. This could mean someone is trying to guess PINs. Another tipoff is multiple phones using the same PIN at the same time or within a short period of time. This would suggest that the same PIN is being used by more than one student, a situation that the PIN owner is not likely to have authorized.

Institutional Excellence Award...

Continued from page 1

Babson College, Babson Park, Massachusetts
Mary Lou Duncan, Manager, Telecommunications Project: GlobeNet, a Campus Networking Project

The major goals of the project were: provide expanded and enhanced campus-wide computing; provide access to electronic information resources, both on and off campus; and facilitate collaboration and innovation among all members of the Babson community and their colleagues at other institutions. The project included the installation of a new voice and data digital PBX system, delivery of network services to 45 campus buildings, and upgrade and expansion of the campus computing lab facilities.

Brock University, Saint Catharines, Ontario
Bruce McCormack, Asst. Director of Computing and Communications Services
Project: Information Technology Enhancement Program

The goal of Brock’s information enhancement program was to increase productivity and improve customer service. The project included the upgrade of the campus PBX and deployment of a campus wiring standard, ID card system, residence hall CATV service, and ethernet campus network. The major benefits of the project have been enhanced capacity, new service options, improved access, and increased operating efficiency.

The Institutional Excellence in Telecommunications award is ACUTA’s most prestigious award. Winners are announced at the banquet at the ACUTA annual conference in July, where they receive an exquisite Steuben crystal trophy. In addition, winners receive two paid registrations to the annual conference and are highlighted in a newsletter article.

To apply, institutions must submit documentation specifically describing a telecommunications endeavor, product, or service which demonstrates excellence and professionalism. Applications are evaluated on the basis of: scope and complexity of the endeavor; technological leadership; benefit to the institution; and demonstration of excellence. Three awards may be given annually, one to a member institution in each of the following enrollment categories: 1,000 students or less; 1,001–5,000 students; and more than 5,000 students.

Each ACUTA member institution is encouraged to apply for the 1996 awards. Applications must be postmarked by March 15, 1996. For more information, see the insert with this newsletter or contact Lisa Cheshire at the ACUTA office (606) 278-3338 or e-mail lcheshire@acuta.org. Or write to: ACUTA Institutional Excellence in Telecommunications Award, 152 W. Zandale Dr., Ste. 200, Lexington, KY 40503-2486.
Gettysburg merger of library and computing services structured on self-directed teams

The academic library and computing services departments at Gettysburg College have been transformed into a learning organization through a merged new division, Information Resources, directed by Vice President for Strategic Information Resources Dennis Aebersold. Computing services personnel moved into the library building in summer 1994; in January the division adopted an innovative structure based on six permanent, self-directed teams—response, selection, delivery, training, new initiatives, and planning—to serve campus information needs. Contact: ir-plan@gettysburg.edu

Don Kingston is Gettysburg’s ACUTA rep.

California Lutheran’s Office of Information Systems debuts web-based help services

The Office of Information Systems and Services of California Lutheran University now augments traditional services through a Web-based “reference desk” and “help desk,” a full listing of workshops with electronic registration, and html-format training materials and documentation. Other aspects of the new Web emphasis at CLU: an ISS training program for faculty resulted in a variety of interactive course syllabi on departmental home pages; the alumni magazine’s first electronic issue appeared on the Web last June; the University now offers a Web interface to its online library catalog and several full-text bibliographic databases. Contact: http://robes.callutheran.edu/htdocs/ISS/newiss.html

ACUTA rep at California Lutheran is Tammy Cormier.

Lehigh University project brings computing to residence halls

The WIRED Project at Lehigh University now brings networked resources to all undergraduate residential units except fraternity and sorority houses, and is expected to reach those groups by next fall. Services include direct connection to the Internet across the campus backbone, and local services such as shared access to laser printers in residence halls, to files, and to commonly used applications. Participation costs $40 per semester, and students purchase their own ethernet adapters which conform to Computing Center standards. [Source: Computing at Lehigh, Oct. ’95]

Roy Graver represents Lehigh at ACUTA events.

Marquette moves to online housing assignment system

Last year, Marquette University’s Office of Residence Life worked with Computer Services to replace the old in-line, manual room assignment process with an online, automated one. The new system, activated in time for the fall 1995 assignments, lets students view all rooms, select a room, assign a roommate, select a meal plan and calculate charges, and change rooms; it then generates housing contracts. Students are assigned times to select housing based on priority categories.

ACUTA representative at Marquette is Dawn Lotz.

Colorado creates electronic community college

The Colorado General Assembly has created a 12th community college campus within the state system: the Colorado Electronic Community College (CECC). Through collaboration with Jones Education Networks and other partners, CECC will be an umbrella organization offering a full range of transferable general education curricula leading to AA and AS degrees via television, telephone, Internet, CD-ROM, and satellite technologies. Five courses were being offered in September to 60 registered students from eight states. Contact: Exec. Director Mary Beth Susman, sb_marybeth@mash.colorado.edu

[Higher Education Delivery Systems for the Twenty-First Century, SHEEO, Oct 1995]

Kent State commits to multi-campus technology and learning center

Kent State University has begun a project to transform a stately-but-aging former residence hall into a state-of-the-art Technologies and Learning Center, a high-tech hub for master classrooms, labs, and training centers throughout all campuses, linked by the Internet. The project will enable distributed classes and outreach to businesses, hospitals, and community schools, and has been linked with Ohio’s Schoolnet project to wire every classroom in the state for data, voice, and video. Progress reports available at http://www.educ.kent.edu/moulton.html. [From an article by Kent State President Carol Cartwright, Educators’ Tech Exchange, Fall 1995]

Margie Milone is Kent State’s ACUTA representative.

Thanks to CAUSE’s electronically delivered Campuswatch for some of the information on this page.
Visions of the future

Reporting on the TSAPI Conference held in San Francisco in October, Voice Technology & Services News (10/31/95) summarizes the view of the future presented by industry insiders: "Telephone calls will be free, the PBX will morph into a super network server, the telephone and the computer will become one, and everyone will use distributed telephony in the future." The article quotes John Clayton, president of telephony firm Clafin & Clayton, Inc., as saying, "Voice data is really just data and you shouldn't have to pay to send it."

On the other hand, Business Week (10/30/95) quotes IBM's Lou Gerstner's vision of the future: "The future is a network-centric model... The first wave of computing, 30 years ago, was driven by the technologies of host-based processors and storage devices. Twenty years later, we moved into a second wave, which was driven by microprocessors and simplified operating systems. The third wave of computing is being driven by very powerful networked technologies that provide very inexpensive and very wide bandwidth."

Technology evolution

Will our telephone, television, and computer merge into a personal communication center? According to Wired (11/95), MIT Media Center Director Nicholas Negroponte believes computers are going to replace TVs because "for the past five years, people who build TV sets have been putting more and more computation into their TVs, and people who build personal computers have been putting more and more video into their personal computers. When these two industrial trends converge, there will be no distinction between the two... In the future, we won't be pushing bits at people like we're doing today. It doesn't matter whether you call the receiver a TV or a PC. What's going to change is how those bits are delivered."

Evidence of the morphing process could be seen next year, when N.J.-based International Discount Telecommunications Corp. will start an Internet telephony service that allows computer users to ring up anyone with a telephone. Other Internet telephony services require both parties to be online in order to talk. IDT's service, described in the Wall Street Journal (11/10/95), enables an Internet user to patch into the local telephone network of the person being called — and for about one tenth the cost of an international phone call. IDT will have plenty of competition though; the publisher of NetWatch newsletter is starting a Free World Dialup experimental service, similar to IDT's, and a number of other companies are starting PC-to-PC services.

Groceries go online

According to the Cincinnati Enquirer (11/9/95), Kroger supermarkets in Columbus, Ohio will soon be accepting grocery orders via the Internet for home delivery. Customers will call up Kroger's new site on the World Wide Web, browse a menu of "aisles" of groceries or search for specific items, total the order, and pay when it's delivered. Delivery will cost $10 for orders up to $100, and 10% of the bill for orders over $100.

Compaq to offer desktop videoconferencing

The Wall Street Journal (10/26/95) reports that Compaq Computer will begin shipping business PCs equipped with Intel's ProShare videoconferencing technology next year. ProShare displays a caller's picture in a small box on the screen and allows users to share documents and work on them simultaneously. The system initially will add $700 to $800 to the cost of the PC.

Could scanner replace copier?

Hewlett Packard has introduced the ScanJet 4Si scanner which handles 15 pages a minute, and operates from a network rather than a single computer. Scanned documents can then be printed out or sent to other PCs via fax or e-mail. HP hopes to compete in the copy machine market with the speedy performance and low price ($3,000). "What's the point in having a photocopier? It's just an extra piece of hardware," says a bank manager who tested the machine. [From the Wall Street Journal (10/31/95)]

Block those viruses

McAfee Associates has a new product called WebScan that identifies virus-tainted programs before they're downloaded and warns the user not to continue. WebScan is the first product that prevents viruses from infecting a computer, rather than attacking the problem after it's occurred.

Video-on-demand via Internet

From Business Week (11/6/95); VDOnet Corp.'s VDOlive technology will enable basic, live video to be shipped over the Internet using ordinary phone lines. The system's compression algorithm sends 10 frames per second over a phone line, increasing to 30-frames-per-second broadcast quality when using an ISDN line. The company's CEO says VDOlive could enable anyone with an Internet connection to become a video broadcaster.
Hearing Aid Compatibility Rules Proposed by FCC

ACUTA members and our Legislative/Regulatory Affairs Committee have been closely watching the FCC’s progress in developing rules for hearing aid compatibility (HAC) of telephones. Members were concerned about the high cost of replacing or retrofitting thousands of telephones. In an order issued in June, 1992, the FCC had originally required all workplace and common area (including dormitories) telephones to be HAC by May 1, 1993. In a March, 1993 letter to the FCC, ACUTA Legislative/Regulatory Affairs Committee Chair Randy Collett told the Commission that, “Implementation of this requirement will cause substantial financial resources to be redirected from our members’ primary mission of educating students to replacement of telecommunications equipment. Such actions are clearly not in the public interest.” ACUTA supported the provision of HAC phones upon request, but objected to the blanket requirement.

In response to comments from ACUTA and others, this requirement was suspended due to the difficulties and costs of implementation. In late 1994, the Commission decided to take an unorthodox approach to resolving this issue. They formed a “Negotiated Rulemaking Committee” composed of interested organizations, charged with developing regulations that would be acceptable to all parties and the Commission. The committee included advocates for the hearing impaired, equipment manufacturers, telephone companies, and major user organizations. ACUTA had input to the committee through our liaison with TCA and their attorneys. The committee was able to reach agreement, and their report was issued in August. The FCC acted on November 28 to issue a formal Notice of Proposed Rulemaking.

The newly proposed rules would not require replacement or retrofitting of telephones currently in use. Instead, they will require that most phones in the workplace be HAC by January 1, 2000. (for phones purchased between 1985 and 1989, the deadline would be January 1, 2005.) Hospitals, nursing homes, and other “confined settings” with 50 or more beds would be required to have HAC phones within one year of the Commission’s final order, and hotels with 80 or more rooms would have two years to comply. Retrofitting for volume control will not be required, but newly acquired phones would have to have volume controls, once the FCC has issued standards.

We are closely examining these proposed rules, which were issued only three days prior to printing this issue of ACUTA News. However, our first reading indicates that they would be far less costly than the original regulations, saving most colleges and universities hundreds of thousands of dollars in replacement of telecommunications equipment! We are pleased that the negotiated rulemaking process has apparently worked, balancing the need for accessibility to HAC telephones with the financial burdens on educational institutions and other businesses.

1996 ACUTA Events

Winter Seminars
January 21–24
Phoenix, Arizona
Sheraton San Marcos
Topics
Wireless Technologies Tutorial
Student Services

Spring Seminar
March 31–April 3
Seattle, Washington
Sheraton Seattle Hotel & Towers
Topic
PBX Technology

25th Annual Conference
Silver Anniversary Celebration
July 14–18
Chicago, Illinois
Chicago Hilton & Towers
Featured Speakers
Breakout Sessions
User Groups
Exhibits

Fall Seminars
October 27–30
Alexandria, Virginia
Radisson Plaza Hotel at Mark Center
Topics
Desktop Video: Management Issues & Applications
Desktop Video: Technical Issues
Editor's Notes...

America Online and AT&T are to be commended for recently announcing giveaway programs designed to aid schools. Partnering benefits everybody!... Ohio State Univ. is hosting a national, unmoderated e-mail discussion list for people interested in Metricom and other wireless campuswide networks. To subscribe, send e-mail to listserv@lists.acs.ohio-state.edu with no subject line, and the one-line message subscribe metricom yourfirstname yourlastname... Share the news from your campus! Contact Pat Scott at (606) 278-3338 or e-mail pscott@acuta.org.

Welcome New Members
October, 1995

Institutional Members
• Bridgewater College, Bridgewater, VA. Stephen L. Flora, 540/828-5656 (Tier 1)
• Oral Roberts University, Tulsa, OK. Kenny Winegarten, 918/495-7112 (Tier 2)
• San Jose State University, San Jose, CA. Karen McCarty, 408/924-2314 (Tier 4)
• University of Nevada, Reno, NV. Paul Rowan, 702/784-6083 (Tier 3)

Corporate Affiliates
Bronze Level
• Mitel Corporation, Kanata, Ontario, Canada. Lorraine Small, 613/592-2122, ext. 4044

Copper Level
• Oltronics, Inc., Orlando, FL. Bob Oliver, 407/345-0002

Position Available

Educational Technology Specialist
SUNY State College of Optometry
Seeking dynamic, flexible individual to handle variety of computer software, support & planning functions in a specialized education setting.

Responsibilities: Training & consulting on academic & presentation software; organization of instructional program; assistance with implementation, mgmt., planning & support of TCP/IP connection, LANs, Internet & WWW; general troubleshooting. Key role in strategic planning of new info systems (to be implemented as we move to new site).

Requirements: BA/BS/MA in comp. sci., engineering, or related field. Exp. with LANs & Internet (incl. TCP/IP, HTML, Web server software); familiarity with UNIX, IBM PC & Mac platforms. Strong interpersonal skills, commitment to service. Pref: teaching & admin. skills; working knowledge of presentation software, hardware & multimedia; exp. in acad/special lib. or computer lab/systems office; exp. with VAX-based systems; interest in effective use of emerging technologies in the curriculum. Flexibility, sense of cooperation, initiative in learning new skills & adapting to changing work environ.

Salary: DOE plus excellent benefits

Contact: Send resume, letter of app. with names, addresses & phones of 3 prof. refs. by Dec. 15 to Doug Schading, Personnel Dir., SUNY State College of Optometry, 100 East 24th St., NY, NY 10010. Query to: R. Fogel, 212/780-5089, e-mail fogel@sunyopt.edu

Position Available

Columbia University
Be part of a team supporting a premier institution of higher education. Seeking two experienced, customer-oriented telecom professionals to take part in several challenging projects within a Rolm CBX telecom network.

Network Technician
Responsibilities: Designs, installs, and maintains digitally switched telecom eqpt., networks, and services. Responsible for cabling and wiring. BA pref.; minimum one year exp. in installing/maintaining standard industry telecom eqpt. Exp. with cabling/wiring and ethernet installation. Exp. within a Rolm CBX multi-bldg. environment pref. Fiber optics/cable TV exp. pref.

Telecom Analyst
Responsibilities: Promotes and coordinates telecom services for students, faculty, and staff. Works with new and emerging telecom technologies. BA pref.; minimum one year exp. with a large, digital PBX. Exp. with video conferencing, voice mail, and ACD pref. Ability to communicate with technical/non-technical personnel.

Competitive salaries, excellent benefits.

Contact: Send resume including salary requirement and title of desired position to Personnel Manager-AIS, Columbia Univ., Box 700 Central Mail Room, New York, NY 10027

EO/AAE

Beginning Dec. 1, 1995, FCC rules governing interstate Caller ID will take effect, opening the way for interstate Caller ID service in most areas.
What is the Award?

The award for Institutional Excellence in Telecommunications is ACUTA’s most prestigious award, recognizing telecommunications excellence and professionalism. Winners are announced at the banquet at the Annual Conference, and each is presented with an exquisite piece of Steuben crystal. In addition, winners receive two complimentary registrations for an ACUTA Annual Conference.

How do I apply?

To apply, institutions must submit documentation specifically describing their telecommunications endeavors, products, or services which demonstrate excellence and professionalism as defined in the Evaluation Criteria.

A letter from the institution’s President in support of the contribution of the department to the institution’s mission is also required.

How are winners selected?

Winners are selected on the basis of the telecommunication department’s contribution to and support of the mission of their institution. Applications are evaluated on the basis of: scope and complexity of the endeavor, technological leadership, benefit to the institution and key constituents, and demonstration of excellence and professionalism. The endeavor, product, or service should be innovative and exemplary, and provide significant advantage to the institution, faculty, staff, and/or students.

Up to three awards are given annually, to one institution in each of three enrollment categories: 1,000 students or less; 1,001–5,000 students; and more than 5,000 students.

Award Winners

1993 Delaware Technical and Community College
   Henry Decker, Coordinator, CS & IS
1994 Brigham Young University
   Ferrell Mallory, Director of Telecommunications Services
1994 Fairfield University
   Michael Cioffi, Director of Communications and Technical Services
1995 Connecticut State University System
   James J. Malone, Assistant Vice President for Information Systems
1995 University of Texas Medical Branch at Galveston
   Thomas Epley, Associate Director of Telecommunications

Call for Entries
Application Process

Schedule

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<tr>
<td>March 15</td>
<td>Application deadline</td>
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<tr>
<td>April/May</td>
<td>Application review and evaluation</td>
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<tr>
<td>May 15</td>
<td>Selection of Award Winners</td>
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<td>July 17</td>
<td>Announcement of Winners during the banquet at the Silver Anniversary Celebration, ACUTA’s 25th Annual Conference</td>
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Evaluation Criteria

I. Description of Endeavor, Product, or Service

Briefly describe what was done, where, when, and by whom; purpose; key goals and objectives. Indicate contact person, providing name, title, and address as well as telephone, fax, and electronic mail numbers.

II. Planning, Leadership, and Management Support

Briefly describe the scope, complexity, and nature of planning process required for approval and implementation of the endeavor. Key factors which should be highlighted are vision, strategies, goals, objectives, risks, exposures, organization dynamics, leadership skills, technical competencies, organization culture, and operating environment. How does the effort integrate with the institution’s vision, long range plans, business plans, and human resource programs?

What are specific examples of the level of commitment and involvement by top management? Describe resource commitments/allocation.

Describe the planning tools, data base, and integrity of historical and current data and information for telecommunications planning, decision making, control, and assessment of the endeavor.

III. Promotion of Technology and Maturity of Effort

What is the current state of the telecommunications and network services at the institution? What are the key benefits of the endeavors to the institution, its environment, or well being of its constituents? How does this endeavor integrate with other services and plans? What approaches were used to introduce and promote this technological development and idea to management and various user personnel?

When was the endeavor initiated? How was the effort conceived? Is the approach original, or was an existing approach tailored to fit the organization’s needs? How extensive is the effort within the institution? How does this endeavor compare to the current state of the art in the industry and other institutions of similar size and focus?

IV. Quality, Performance, and Productivity Measurements

What types of quality, performance, and productivity measures were used? How were they linked to the overall improvement effort? How were these measures communicated to the organization? What, specifically, is measured? How did you determine what to measure? What categories of information were collected? How do results compare to indicators established?

V. Cost, Benefit, and Risk Analysis

This section should outline the key components of direct and indirect cost, benefit quantification, risk/exposure quantification, and organizational impact.

VI. Customer Satisfaction and Results To Date

Describe key user involvement with the planning and implementation of the endeavor and related products and services. What has been the reaction of various users to the endeavor? What types of evaluation instruments were used to assess user satisfaction? How does this compare to original plans and expectations? What unanticipated challenges and problems were encountered and how were they resolved?

Application Instructions

Your application should take the form of a document which addresses each section of the Evaluation Criteria. The narrative should effectively describe the telecommunications endeavors, products, or services for which the institution is to be recognized. The documentation should be limited to no more than ten pages, double-spaced, using 12-point type.

Mail completed original along with eight copies to:

ACUTA Institutional Excellence Award
152 W. Zandale, Ste. 200
Lexington, KY 40503-2486

Questions? Contact Lisa Cheshire, (606) 278-3338.