

## **TELECOMMUNICATIONS ADVISORY COMMITTEE MEETING MINUTES— NOVEMBER 6, 2002**

INDUSTRY COMMITTEE MEMBERS IN ATTENDANCE:

CCCCD MEMBERS IN ATTENDANCE:

Glenn C. Wintrich	EDS
Ann Beheler	
Jeff Markowitz	Nortel
Wayne Jones	
James Jobin	Worldcom
Bob Wright	
Skip Knowles	MCI
David Smith	Nortel

Wayne Jones, Associate Dean and Coordinator of the Telecommunications Advisory Committee opened the meeting. Wayne introduced Glenn Wintrich, the Committee Chairman. Glenn asked that everyone introduce himself or herself, to include their work experience in this field. Glenn began by introducing himself; he works with voice over IP, market facing, etc. Skip Knowles spoke next; he's retired from MCI where he worked in long distance, engineering and regional operations in southwest Texas. Ernest Jackson introduced himself as the Director of the Convergence lab here at Collin County Community College (CCCCD). Prior to that he worked for Sigma Networks and Nortel. Jeff Markowitz introduced himself as a previous employee of Nortel, working in training and development both with customer groups and internally. Prior to that, Jeff worked for MCI. James Jobin spoke next; he is currently with Worldcom working in Voice over IP. David Smith introduced himself as an employee with Nortel working in business development and transmission of telephone and data. Wayne Jones introduced himself again. Ann Beheler introduced herself as the Dean of Engineering technology.

Glenn moved on to the topic of old/new business, beginning with review of the minutes from the previous meeting. He directed everyone's attention to the yellow box in the minutes, asking each one present to see where their company fits in those categories. In this way we can move forward with the Committee as well as attempt to get others involved. A few minutes were spent reviewing the minutes. The minutes were unanimously approved for adoption. Glenn moved on to the business of the day, by turning that portion of the meeting over to Ann Beheler.

Ann welcomed those present, explaining that we are an industry driven Division. We need to be driven by what industry needs us to be doing. Ann continued by explaining that the Engineering Technology (ET) Division is inclusive of Telecommunications, Engineering Technology, Semiconductor, Interior Design, Computer Aided Drafting and

Design, Computer Networking, which also encompasses Microsoft, CCNA/CCNP training, etc. She asked that the group consider whether we should have a large group, combining Telecommunications and Computer Networking, since there are general overlaps.

The ET distinctions include an NSF Grant, E2E training for high schools and community colleges. The E2E (Educator to Educator) is held by the National Workforce Center in Bellevue, WA. We currently also have Webmaster courses. The industry changes so much that teachers need to continuously be trained. Also, in order to make credits transferable to four-year colleges, WECM (Workforce Education Course Manual) was introduced by the state of Texas. They standardized courses, but also, unintentionally, stamped courses as non-academic so that now four-year colleges are hesitate to accept the credits. Additionally, we have received funds through the Carl Perkins grant to prepare a model network security-training program. We will be asking the committee members to give us input as to the training skills needed for security training. It will be prepared as an advanced certificate offered through CCCCD. We are also one of nine training institutes for Cisco. On the horizon, CCCCD is currently building new space at SCC, the lower floor will be conference centers; the upper level will consist of labs with some part of it dedicated to technology. Once that is completed, construction of a new building will begin on this campus (PRC).

We are currently offering Unix curriculum sponsored by Sun, structured cabling sponsored by Panduit and web design curriculum under Adobe and CIW certificate courses. We're also working with UNT and SMU on a pre-engineering program. UNT is offering full four-year degrees for engineering, but they don't have the space available for the students. We're working with them to try to house those students at quad-C. We are having an open house for our newly completed Convergence Lab on November 12<sup>th</sup> at 10:00 a.m. All committee members are invited to attend. We want to have equipment and technology in the lab, not necessarily from the same vendor, to put things together and make them work. The lab has virtual office. We need committee members' input; we help the students have the skills for the business you're in. We're looking at one or two IT skills clusters and working on articulation agreements all the way from high school through college. It is difficult for ISDs to work alone; the idea is for all of us to work together.

Glenn Wintrich called on Ernest Jackson to provide an update on the convergence lab. Ernest stated that it's all coming together. We have routers, LANs, calls with wireless and wired IP. We're getting the servers hooked up and filling in the gaps to move forward. We are, however, lacking in video for the on-line courses; he feels right now is the time. Ann elaborated that we had \$250,000 from the TIF grant, which supported some equipment. As a result of downsizing, Nortel found some retail equipment they were able to donate to us. Additionally we received money from lots of sources, putting it all together to make things work. We'll also have webinars—web seminars. Glenn noted, and agreed with Ernest, that now is the time to look at video on demand for on-line courses. Cisco and Nortel have big distance learning centers. Video/on-line courses can be offered for a low price with lots of benefits. We need to think of a vision, what does

the group want to accomplish and how can we articulate that to interest folks and gain new members. We need to be able to present a goal to a company to get more people on board. Glenn asked Ann what she needs the committee to do.

Ann indicated that, in the past there had been a different approach to Advisory Committees. A new booklet, given out to those present, gives a new and better set of guidelines. She asked that everyone review the booklet so that it can be discussed at the next meeting to ensure we have the correct balance and broad overview of the community. Glenn added that a general discussion meeting should be held twice a year, but the group would be remiss in meeting the goals if we don't meet more often. He feels the group needs to meet more often during the year for feedback; committee members should have ownership of subgroups to meet in the February/March timeframe to bring information to the next meeting in March.

It would be a good idea to take students to individuals, e.g. at Nortel. What could be set up for students to participate, or maybe get credit, do research, etc. that feeds into their classes, prepare case studies for the students. We want to ensure the students don't get tunnel vision; we want to make them more employable and broaden their skills. Once we do these types of activities, perhaps even invite Channel 4 News! We could add the information to the quad-C website. Glenn agrees with Ann that students of today will be the one ready when the industry goes up again. James Jobin added that MCI couldn't bring policies and procedures to the group; the legal liaison from the company doesn't like sharing. Glenn agreed; possibly we could have a guest instructor teach the class for one hour in a day regarding, e.g. security, LAN, etc. SMU has such a program in the marketing department. Each night of the course, the first hour is started by a new guest speaker to teach the class. It generates a lot of interest.

Ann also suggested that speakers visit the IEEE group too. A high tech symposium next June will be looking for speakers to talk to high school students and their parents. Wayne added that Sandia Labs would be visiting IEEE this month. Glenn mentioned that Texas Instruments also has interesting things going on in the near future. Perhaps we could get someone from Worldcom to give a presentation to the students, not hype but reality. This is the right opportunity for webinars.

Glenn would like to see a subgroup of members who will compile a list of those interested in speaking to high school students, etc., e.g. wireless security, optical market place, etc. Need someone to work with smaller team, who will work with the faculty, to set-up speakers. Glenn will form this group.

Skip Knowles asked what is it we're looking at—the broader demand? What drives it? Through the 90s had all visionary stuff. The point now is we need to know what's driving it. "Buzz" words, there are machines now to do more applications to drive BANDwidth. What will drive the demand to use the infrastructure? Companies are dropping. What is the vision of the industry? There's pressure now. Wayne Jones responded, stating that's an interesting and good question—where are we going from here? Skip elaborated that at MCI, only about 20% of fiber lying out there is utilized. Glenn added that some colleges are concerned as to how many students would take

classes to support the industry. On-line is a good way for those who can't travel. Those are the types of things that drive the industry, like education, cities, states, etc., when we become an on-line society. Ernest offered that, on a broader view, DOT is indicating that more people are working at home; they don't travel on the highways. Ann interjected that Cisco has put out home technology integration specialist training room Vendia criteria for in-home use. We're trying to do a service-learning program from that. We can do it because we don't charge money. Students who do this work for pay could then form their own company, for pay.

Glenn continued by saying that technicians now do jobs more simply with modern test equipment and tools. Some companies are throwing away computers, some leasing computers. There are lots of opportunities for pro bono work. Skip inquired if the courses are a full semester. Ann responded that almost all are, most are credit, some are continuing ed classes. Most of what we offer in computer networking is within an eight week timeframe. It is split in half to do two courses per semester; doubled up on courses. Glenn commented that on CSE is a good example of course on campus and on line. A student loads the material on an engine, then registers on-line. Skip added that set top boxes are used a lot in Europe; that was their vision of video on demand and in home services. Glenn feels that set top boxes take a great deal of commitment from a company. Jeff Markowitz stated that Nortel hired a company to work with wireless companies. What's driving the wireless market, not only in Nortel but others in industry, can bring lots of students to speak. He knows of some individuals who think audio on demand is better than video on demand. There's a huge gap in the basic skills and the technical skills.

Glenn moved on to the topic of white papers; he feels the idea of English courses is important. If students have to take an English course, and have to write a paper, why not write a paper on technology. Students can learn what are good basics for material, how to prepare the pros and cons of a good paper. Folks have to be willing to bring credible topics to the table. Have to plan how to handle it. Can't expect English teachers to grade technical papers, other than grammar and spelling. Ann responded that, just yesterday, got acceptance from the Dean of Communications and Humanities for a learning community course, e.g. English and engineering technology classes, so that they are work related. In terms of people from industry, having representatives from industry to critique would be a good idea. Bob Wright indicated that he has his class write a paper as if it was in the corporate world. Glenn continued by saying that vendor integration papers are a good idea; perhaps we could put them on-line for companies to do to add to; offer some things they didn't know about. Writing a design guide can be harder than doing the work itself. General training procedures written so if a person is on vacation, there's a guide. Skip added that there are several technicians who think my way is the better way. When see previous technicians work, think he/she was an idiot. They can be asked to prepare a paper on why they think it was done that way. Helps technicians communicate with his/her clients, and broaden their thinking.

Jeff mentioned that when service gaps are discussed, the opportunity to go to MCI, HP, etc., talk to service managers, interview, bring to a panel, discuss their skills sets, etc.

Perhaps offer a certificate for students. Skip said some companies contract out to other third parties, installation companies. They have the same problems. Give them communication skills sets. Excellent technician will solve the problem but the company relation is damaged.

Glenn mentioned we need to know what would be the things on a resume regarding vendor integration, company authored white papers, work/wrote guidebook for homeless shelter. If a student can put that on a resume, it shows communication skills. Companies don't care if a student went to school and got all A's. What else did they do with their skills? Bob mentioned there is a big difference in a person who flips burgers at a summer job as opposed to working in their field. Ann asked the group if they've reviewed our telecommunications curriculum. Would like the group to review the curriculum, as well as newly proposed curriculum in MCSE and CCNA. Glenn added that there used to be bench time if you're a CCNP and you've done your work in 7 hours, you're sitting on the bench the rest of the time. Companies have done away with those types of positions. They need people who have communications skills. It adds to a student's skills, it doesn't subtract.

Ann mentioned that the computer networking program tracks, instead of total generalist, have some depth. The concept of larger communication then breaks down into subcommittees. There is a lot of overlapping between them. Glenn said that even if the group meets twice a year, it's the subgroup, which would do a lot of the work. What are some of the little things that can be done? Site survey, look at available power, have some focus on design guide, training material, etc. Jeff Markowitz agreed to work with Ann Beheler on distance learning, gap analysis, etc. Ann agreed, they'd be tasked with analyzing what can be done on-line/distance learning. The twist is how to do labs, or hands-on exposure; we have enough technology, now have to do initial labs in a simulated fashion. Glenn suggested that perhaps we could get some donated equipment to put in some of the common areas of the college.

In summary, Glenn would like to prioritize a list so that the committee will know what they want to take on at the next meeting. Ann suggested that at the next Computer Networking Advisory Committee meeting we could take items from today's meeting, and prioritize. Computer Networking should be having a meeting before Christmas. The goal of the Computer Networking meeting is to see what you want to work on and what you're willing to do to help. Ann sees a common thread of soft skills, an integration of skills. Need to ask what is the priority. Glenn mentioned that, at the last meeting we had student input, but not at this one. He would like to ask the students, especially graduates, if they are prepared in skills and training, etc. Jeff would like to talk to some students who have gone through the telephony class to see if the course material is useful. Wayne interjected that we are in the process of a self-study of several of our disciplines. Perhaps we could call on the Committee members to be part of the review group. Ann added that we review our programs each five years for a SACS review each ten years. CCCCD is scheduled for a SACS review in fall 2004.

Next meeting is scheduled for March 21, 2003 @ 2:00 p.m.  
The meeting was adjourned.