## ENGINEERING TECHNOLOGY ADVISORY COMMITTEE MEETING MINUTES FROM MARCH 11, 2003

## **COMMITTEE MEMBERS PRESENT:**

KEVIN MARLER
JIM PHILIPP
STEPHEN WILLIS
RAY GRIMES
GLENN WINTRICH
ROBERT ORTEGA
TONY PHELPS
CRAIG NORRIS
TERRY CORNELIUS
DON HAYES

## COLLIN COUNTY COMMUNITY COLLEGE MEMBERS PRESENT:

TONI JENKINS
SERENA JOHNSON BUTLER
ANDY RUSH
MIKE HARSH
COPE CRISSON
PETE BRIERLEY
JOHN PERRINE
JANET JAWORSKI
WAYNE JONES
DAVE HOYT
ROBERT MEEKS
LARRY MAUGHAN
JOHN WILKINS
TOM MOBLEY
ANN BEHELER

Dean Ann Beheler opened the meeting. Everyone introduced themselves to the committee. Ann then introduced Glenn Wintrich, as the chairperson of this committee; he will run the meeting, then subcommittees will be formed as needed.

Glenn asked that all present review the minutes. Once read, Glenn asked for a motion to adopt the minutes. A motion was made for adoption of the minutes, and seconded. A meeting for this group was originally scheduled for February 21<sup>st</sup>, however due to the inclement weather of ice and freezing rain, it was rescheduled for today. In keeping with the agenda, Glenn proceeded with New Program discussion. Ann Beheler discussed the programs, directing the committee to the copies in their packets. We realize that the two

major disciplines in the computer networking area are the Cisco and Microsoft programs. CCNP and MCSE certificates are available. We want to help the student who wants to be prepared even though they have no experience. Also want to provide certificates that parallel. We haven't had as many completers as we'd like. Ideally, we had planned to discuss the new program with the committee, prior to the CAB deadline of March 1<sup>st</sup> (on the ice day of February 25<sup>th</sup>.) Therefore, we had to move forward without committee review. Glenn emphasized that it is very important that students can apply the skills in the community hands on. Ann asked Toni Jenkins if we need a motion by the committee to approve the new programs; she said yes. Ann asked for a motion. A motion was made and seconded. It was noted that we needed industry members to make a motion; Stephen Willis seconded it.

Ann asked Wayne Jones to discuss the new Electro-Optical program. Wayne explained that industry was the driving force behind development of this program. We're the second community college in the state to have such a program; the goal is to prepare students. The degree plan is 68\* hours and the certificate program is 32\* hours. All the courses are in accordance with the WECM guidelines. Glenn inquired as to how many lab hours are included. Wayne responded that all the courses have a lab component. Of a 4 credit hour class, it's a 3/3 class—3 lecture, 3 lab. We're looking for partnership for these classes.

Ann indicated that Nortel has a lab they are willing to share. Glenn asked if a Nortel representative was present today; Ann said no, we did expect her to come but she did not show up. Janet Jaworski inquired whether or not we would be preparing this for Tech Prep, as there are several steps to take to accomplish that task. Wayne responded that we have not yet moved in that direction. Janet asked if we were thinking of it. Ann responded that we are still considering it. Wayne asked Janet if she felt we should? Janet replied that we might want to consider Tech Prep to offer it to high school students. Glenn moved for a motion to accept the curriculum. A motion was made and seconded.

Glenn asked Janet to elaborate on the Tech Prep program. She explained that students take courses in high school and then enroll in CCCCD. They get those credits from the high school level. It's motivation to students of the college credit but also to parents because they have to get a B grade or better.

Ann distributed the Advisory Committees Handbook, for those who did not already have one. She explained that we exist to prepare the students. We look to the group for guidance. Ann asked that they please read the booklet. We need industry's involvement to be successful. The handbook gives the rules of order. She thanked the group for dedicating their time to this committee.

Glenn continued with industry trends. We have a diverse group present. We thought things in the technology field were going to go up, but with the stock market going down and the possibility of war, hiring is not being done. How can we help bridge the gap of ranges in students just out of college, to career change students? There are changes, challenges in hiring; now employers are being more selective in their hiring process.

What are the important trends? Kevin Marler responded that they are seeing industry try to do the same amount of working with fewer employees to do it with, because of the lay offs. As a result, the employees are overloaded. This may create an opportunity for coop to help ease the overload. Business needs to know how to help in this way. Glenn emphasized that it would be good to form a subcommittee to get the message to companies regarding co-ops. For donations of equipment, need to work through the legal and tax accounting departments. Companies benefit from donations. Ann asked Kevin if he would be able to assist us with Raytheon? He said he'd be able to help with some key points he has learned. Glenn added that companies could utilize a buy back program. Kevin said that a reseller determines if there's any value. Glenn stressed the employer who observes a co-op student's performance, is already familiar with the work product, as opposed to someone hired off the street. This can be a great advantage for all involved.

Larry Maughan expressed difficulty in meeting with the decision makers regarding co-op students. If the committee has contact information, please pass it along. It was pointed out that the problem with the downturn is that individuals are not the decision makers anymore. Glenn asked Larry if there was a standard process to contact the companies or is it customized? Larry responded that it's customized every time he does a job request. Need to fit the student into the request. It's finding the decision maker that is making it difficult. Glenn suggested that a subcommittee be formed to help the committee understand the companies. It would also be good to have a resume subcommittee. That's important in this day and age. Can't have spelling and grammar errors. Then put info regarding the resume subcommittee on the CCCCD website for students to view. Larry stressed that CCCCD has a program for resume writing, but the students don't always use it because they feel, why have a resume if there aren't any jobs out there. Ann asked that if Larry were in need of a student to fill a co-op position, to please contact the division office and we would find a student to fill the position.

Wayne proceeded by addressing a question to Glenn, that we need feedback of what would need to take place in new technology to see vibrancy return to technology. Glenn works in developing business and technical solutions at EDS. Right now it's ROI (return on investment). Need to prepare students to be aware where the productivity is, the upswing. To know why it is occurring will help the college. ROI sees that LAN will be big key to wireless. Tony Phelps agreed with Glenn. ROI, hardware is being looked at, implanting those into solutions. Pete Brierley indicated that one of the major issues regarding wireless is security. Glenn elaborated that that's why companies are incorporating security with wireless. It has to go to a server with the security on it. Tony feels that wireless is the key now. Glenn elaborated that students' resumes, have to show that the student understands solutions in business as well as the individual application problem. A solutions approach is beneficial. System thinking is where the up tick will occur. Ann feels students need to be able to communicate technology and know the industry.

Glenn feels students need to have technical knowledge. They need to be aware of it. When the up tick occurs they may need knowledge of sales not just technology.

Students need to be able to align the business and technical aspects as well. Glenn posed the question to the instructors present—do they inform students of this need?

Tom Jones commented that they try to tie it into the course, one way or another, with projects or research to what the students can relate to in a business situation. For example, presenting information to a manager; however, instructors probably need to do more

Glenn asked if everyone present received the call to arms letter. It addressed a setup of giving constructive feedback to students on papers or projects. He knows someone who would be able to do it. Glenn would like to have a committee on this, as well as a committee on something that was discussed at the last meeting—white papers. It is great to have it as a repository. Students might have good English papers, but bad technical papers. We have the convergence lab at CCCCD, or should we wait for SIP or use older technology. Ann added that we would like the community to be involved in the convergence lab. Purpose of the lab is for students to get the opportunity to work with pieces of technology to solve problems. We need industry assistance to develop scenarios to troubleshoot then also to check behind the students to see how they solve the problem. Also, working with small and medium businesses to utilize the lab as a test area for new products. Additionally, utilize the lab for training purposes; small and medium businesses don't have the larger labs available to them.

Glenn stated that he would like to see the committee grow with large as well as midsize businesses. If we have the opportunity to meet in a business group setting and talk about the Advisory Committee that would be a good time to introduce the committee to the group. Members of the community would be highly valued. In the call to arms letter it was stressed the importance of not allowing the group to become static and just meet every 1-3 months. Glenn would like to see members put their name on paper to review items for curriculum changes, working with students, etc. It's ok to sit in a meeting a couple of times and just listen, but we would really like to see involvement, commitment.

Toni reiterated that, from our perspective, we want the committee's involvement now, more than ever, as we see a decline in enrollment, for obvious reasons. We think we can create new opportunities for students, but we need your help; we need more people and more ideas. We appreciate all of Glenn's work as the chairperson. If we're working in a vacuum, we're not doing anyone any good. Glenn added that he wants to find a project for students to work on within the community. The community is important now more than ever. The first thing is the Samaritan Inn in McKinney; they're moving to a new building. Please add website information to the minutes: <a href="www.thesamaritaninn.org">www.thesamaritaninn.org</a> One big thing is that CCCCD is already involved in outreach with wireless, high speed, access. One step for a student to go through is a site survey. What's involved, how to document, what's the purpose. When come back, do an implementation plan, deployment plan. Then, once it's installed have a user guide and trainer program. Finally, have to close out the plan and prepare documentation. If over two years the students are involved in four projects, and do one or two of these tasks, they will be able to put it on their resume. Give students the opportunity and this will benefit the

community, the college, the students, public relations, etc. How do you go about finding free equipment, who do we work with regarding public relations, etc.? There is a lot of work to be done. "We" is ourselves and co-workers at respective companies. What's next to get something like this off the ground?

Tony added that commitments need to be made, need to think through a project. Regarding equipment, he could check with Cisco, who has such a program for equipment. Glenn agreed, individuals need to step up. We've discussed overall strategies; need to prioritize the list of tasks needed. Two weeks from today an email will be sent out to all attendees, with it will be a list of needs. Jim Phillips will assist Glenn in this endeavor. Andy Rush said that he works with dual credit programs at the high school level with the Cisco program. He tries to stress to his students to get all the experience they can. If they can start at the high school level, present it where they can have good hands-on experience, etc., it can be made as a train-the-trainer program. They can see that they have leadership skills/capabilities.

Toni said that high school teachers would like to know what is out there for students. She asked those faculty present how they feel about the service, case studies, etc. Joe Hackney shared with the committee that such an exercise was done with the CADD class. There's a 100-year-old church in Celina in need of renovation, with a small group of parishioners who don't have a lot of resources available to them. The twenty-one students of Warner Richeson's CADD class presented twenty-one different plans for the church to review.

Serena Johnson Butler added that Cisco students would die to be able to do such a project. They want those opportunities made available to them. Stephen Willis mentioned that there are several infrastructure projects at Texas A&M. There needs to be ongoing feedback and support from those who do the program.

Pete inquired as to a feasibility study about doing a project. Glenn agreed that a feasibility study is important. Pete volunteered to assist with such a study. Toni feels a project will pick up steam as we go along and the Advisory Committee becomes involved. It's a resume builder for students to also help with co-op. Something manageable to present to the students. Glenn inquired if students are able to get credit for these types of projects? Ann responded that, yes, we have service learning capability for credit. Every course she's taught in the past always included a major course on service learning. Tom Mobley explained that the wireless course is a 16-week course and would provide ample time for a project. Additionally, the IEEE students might also like to be involved in such a project. Janet added that the high school students are involved in job shadowing for a day. The Tech Prep program is looking for industry representatives who would be willing to have a student job shadow.

Glenn continued, indicating that Pete Brierley will be conducting a feasibility study. We will be sending out a list of proposed subcommittees in a couple of weeks with the minutes of today's meeting. We'll be able to then talk about the progress. We can't wait

three months to come back and discuss again. Ann interjected that the second 8-weeks classes begin next week. We might want to consider something for those students. Glenn said some of the larger companies have internal websites that have lots of different information. It would be nice to see the case study behind a problem, as well as the solution.

Glenn introduced Helen Sullivan to the Committee. Helen gave a Tech Prep Conference update. The Tech Prep consortium has begun planning for the upcoming tech symposium. The Tech Prep conference is scheduled for June 16th and 17<sup>th</sup>, 2003 at Plano Center. Basically the audience is high school faculty and students. Present different skills to reach the students. Monday night the focus will be on students and parents. There will be several speakers, a mini college fair, etc. There will also be a road map to the future. Sandia Labs is sending a representative. CCCCD's programs will be discussed. Janet Jaworski from Tech Prep also has several speakers scheduled to attend, to include a representative from Bridges.com.manning, Dr. Rene from EDS and others. There will be several speakers available to interact with throughout the day. Helen mentioned that there would also be an articulation panel to assist students to know how to transfer from the college to the university level. There will be vendor talks during the day. We've had some good sponsorship that has made it possible to charge a low fee of \$50 for the two-day event; that cost mostly covers the lunches. Additionally, high school faculty attending the conference will receive continuing education credits at night. For the evening sessions, students' parents will get in free. The first sessions begin at 9 a.m., and the evening speakers begin at 6 p.m. Helen will provide a word document to send out information on the conference with the minutes.

In accordance with the agenda, Glenn asked Ann to present program updates. Ann said we're pleased we were able to do the Electro-Optical Engineering and the Computer Networking program. We anticipate approval for full implementation in the fall. Additionally, Bob Meeks recently attended ABET conference. We're trying to get ABET accreditation. Wayne added that he and Tom Mobley were approved to be a program evaluator for IEEE.

Ann continued the updates by stating that we're part of an eight-college consortium dealing with security. WECM work force was here two weeks ago, and we're working on appropriate courses for a security class for a certificate and degree program. We need to have an understanding of things to protect security; forensics is on the high end. We would appreciate feedback as to what is best, what is needed most. Would like to see who is interested in security so we don't design the program in a vacuum. We are also excited about our new learning communities program, entitled "To Infinity and Beyond". It is an engineering course and algebra course to help students interested in engineering and a little insecure of their math schools. Most engineering schools don't teach engineering in the first two years. We're working with SMU on the Infinity Project. They have developed cool things to create, and then learn the math behind it.

That concludes the program updates.

Larry Maughan asked that any instructor who can provide feedback stay after the meeting
to speak with him. Robert Ortega asked if we've heard anything about DART access to
the Preston Ridge Campus. Toni commented that it depends on Frisco; we won't have
access till Frisco decides to join DART. It's political. Ann added that we do have
another room for Engineering Technology at the Spring Creek Campus, in the "I"
building. We were having conflicts with the Business and Computer Science classes, but
they've been gracious enough to share with us.

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Before the meeting was adjourned, the next r 8 a.m.	meeting was scheduled for April 29, 2003 at
GLENN WINTRICH Chairperson	Date