Texas Higher Education Coordinating Board

Texas Higher Education Coordinating Board and Lumina Foundation for Education

DRAFT Minutes
Tuning Oversight Council for Engineering
Community Colleges Representatives
January 6, 2011
1:00 to 5:00 p.m.

Wyndham Garden Hotel and Conference Center
Executive Learning Center

Members Attending: April Andreas, Klaus Bartels, Roderick Crowder, Dan Dimitriu, Jess Dowdy, Saad Eways, Dave Galley, Sheryl Harris, Butch Hayes, Martin Knecht, Frank Lewis, Alan Morris, James Nelson, Mariano Olmos, Lynn Peterson, Thomas Pressly, James Sells, Bart Sheinberg, Bernard Smith, Sheldon Wang, Kathryn Wetzel

Facilitators and other Attendees: Charlotte Biggerstaff, Reinold Cornelius, Kevin Lemoine, Araceli Ortiz, Debbie Rodriguez, Sarah Rondinelli, Mary Smith, Melinda Valdez-Ellis, LouAnn Berman (presenter), Martha Ellis (presenter), Rachel Zhang (Tarrant County College Administrator), Ricardo Solis (TSTC – Harlingen administrator)

The meeting convened at 1:00 p.m.

Welcome, Introductions, Implementation Timeline, and Purpose

Dr. Mary Smith opened the meeting of the Community Colleges Committee (CC Committee) by welcoming members and thanking them for their attendance. She pointed out that handouts had been provided electronically on flash drives and asked members to provide their input on the evaluation as to whether the flash drives or paper copies are preferable. She mentioned the dinner that would be taking place after the meeting and asked members who had not already done so but wished to participate to complete a menu, and invited everyone to watch the movie "Flash of Genius" that would be shown after dinner.

Dr. Smith reminded the CC Committee that the meeting was a follow-up to the October 15 breakout session for community college representatives. She described that meeting as a good opportunity for discussion among committee members, and pointed out that when community college representatives had left their individual tuning committees, the university representatives were reluctant to go on with the work in their absence. She mentioned the issues with the "Introduction to Engineering" course that came to light during the meeting, and told the CC Committee that a separate work group would be organized to address the issue. She asked that during today's meeting the focus remain on the future to help the Voluntary Mechanical Engineering Transfer Compact (ME Compact), and future compacts coming from the Tuning project, to be effective in creating a seamless transition for community college and transfer students.

Dr. Smith then discussed the efforts of the Coordinating Board in the *Closing the Gaps by 2015* higher education plan. She pointed out that there is a focus on building relationships. She discussed three initiatives the Coordinating Board is working on: a work group of 12 community college presidents and trustees as well as staff to discover workable solutions and build consensus on the outcomes-based funding model sought by legislators; the awarding of the College Access Challenge Grant, a $11.8M grant to foster partnerships between the state and federal governments, local government entities, and charitable organizations to increase the number of underrepresented students who enroll in and are successful at colleges and universities in Texas; and the Lumina-funded project on Tuning to facilitate transfer of students into university programs. She encouraged CC Committee members to remember that it may take some time for results to be evident from these initiatives and to continue to work toward these goals.

In displaying the timeline that was submitted to Lumina Foundation for Education (Lumina) in November, Dr. Smith explained the direction and procedures for the compacts and the Tuning project overall. She reminded the CC Committee that there has not been sufficient time since the first signing of the ME Compact in fall 2009 to begin seeing many results as yet. She also pointed out that institutions continue to sign the ME Compact, so those institutions are still making changes to curricula and courses to adhere to compact requirements. Course descriptions as determined by the ME Compact Committee were adopted by the Academic Course Guide Manual (ACGM) Committee in March 2010, after a 30-day comment period. The revised ACGM was placed on the Coordinating Board website in fall 2010, so there has not been enough time since adoption of the new course requirements to begin seeing students transferring under these new conditions. This academic year will be the first opportunity to see students transferring after having taken courses under the ME Compact, and school year 2012-13 will see the first transfers who might have completed the full ME Compact. She related an analogy from the Lumina Conference in December that likened changes in higher education to turning a cruise ship – it is a slow, gradual process that can be frustrating. Metrics for assessing the success of the Lumina project have just been completed by the evaluators.

Implications and Discussion of the Texas Common Course Numbering System and Academic Course Guide Manual

Dr. Smith introduced Dr. James Goeman, Assistant Director in the Academic Affairs and Research Division of the Coordinating Board, as the first speaker on the agenda. He addressed the topic of "Implications and Discussion of the Texas Common Course Numbering System and Academic Course Guide Manual (ACGM)."

Dr. Goeman gave an overview of the tools and processes used by the Coordinating Board in bringing forward new courses or changes into the ACGM, and how the Texas Common Course Numbering System (TCCNS) and the ACGM work together to promote student transfer between institutions. The TCCNS is a system for course identification and is composed of two pieces: a rubric and a four-digit number. The first digit in the number indicates the level at which the course is taken; the second digit indicates the number of semester credit hours. The third and fourth digits are unique identifiers for each course. The TCCNS is a voluntary association and is not controlled by the Coordinating Board. It is sponsored by college registrars and admissions officers, and one institution (The University of Texas - Pan American) hosts the website and provides staffing to update the site. It revolves around an online matrix that shows equivalent courses throughout the state. All community and technical colleges in Texas recognize and use these numbers as the native course numbering system; only a few universities use these numbers. However, universities that do not use the TCCNS are required in their course catalogs to identify courses that are equivalent to those listed in the TCCNS. The numbering system is a voluntary system and does not mandate transfer.

He next discussed the ACGM course entries. The Coordinating Board is responsible for maintaining the ACGM, which uses the TCCNS to identify courses. The descriptions of the courses are completed by the Coordinating Board with input from faculty members. The manual describes all the courses available for community colleges to teach for the purpose of academic transfer. Academic transfer is only part of what is done in community colleges – the technical courses for degrees and certificates which are not intended for transfer are not included in the ACGM. The manual serves to let community colleges know what they are allowed to teach for transfer, and is a funding manual. Colleges are funded on contact hours; universities are funded on credit hours. The manual includes the rubric, course number, and title; then there is a course description and an approval number, which is the number submitted when reporting contact hours to the Coordinating Board. Finally, there is a listing of contact hours that can be reported for teaching the course. Community colleges are typically allowed 16 contact hours per credit hour for a lecture course. Fifty minutes of instruction are considered to be an hour.

In developing new courses, the TCCNS Board must first review the application packet and either table the course for more information, deny the application, or approve the course. If the course is approved, the application packet is sent to the Coordinating Board. Universities are also involved before the course is included in the ACGM, because they will be receiving students with the courses on their transcripts. The ACGM Committee looks at the application with an eye toward transfer and the application of credit toward a degree (not as just an elective). A minimum of two universities must certify that a new course will be accepted as a requirement toward a degree in order for a course to be added to the ACGM. The other method for having a new course added involves being able to show "unique need" (clear and demonstrated need AND acceptance by at least one university) for a course.

Dr. Goeman specified that, if a course gets into the ACGM, it must be accepted by another state institution; however, it is not dictated how the course will transfer unless it is part of a Field of Study Curriculum or a transfer compact. (An institution should apply the course as they would their own equivalent course. If an institution unnecessarily requires a student to repeat a course, the student has the right to initiate a Transfer Dispute. The Coordinating Board will investigate and could require the institution to repay the formula funding amount they received for the student to retake the course.) Dr. Goeman invited any further questions or comments via e-mail or telephone.

Methods for Necessary Course-Level Assessment

Dr. Kevin Lemoine introduced the second speaker, Dr. Lou Ann Berman, Assistant Vice President for Student Success of The University of Texas at Tyler (UT-Tyler).

Dr. Berman outlined her presentation as examining how information learned in courses at the community college level is transferred into programs accredited by the Engineering Accreditation Commission of ABET, Inc. (EAC/ABET) at the baccalaureate level so that the assessment meets the expectations for ABET criteria. There are general criteria for ABET focusing on program educational objectives, program outcomes, and continuous improvement, and these impact the curriculum. It is important to emphasize that ABET views program educational objectives and program outcomes as different considerations, and the terms are not interchangeable. Program educational objectives are the expectations for students who have graduated from the baccalaureate program, usually within the first five years. The program outcomes, widely known as the ABET A-K, are defined as "what students will know or be able to do at the time of graduation." This is an important distinction in ABET. Curriculum is defined very broadly by ABET, and the number of required credit hours and specific courses are not specified.

"Building blocks" for this presentation include how course learning outcomes are identified and assessed; how that assessment flows into program outcomes (what students will be able to know, think, or do at the time of graduation); and how these flow into the program educational objectives which include what graduates can do up to five years out.

The crux of the presentation is looking at community college coursework and how it is assessed according to ABET requirements. Community colleges are responsible for maintaining accreditation through the Southern Association of Colleges and Schools (SACS). One criteria for ABET is that the institution is accredited by SACS, so these considerations build on each other. Tuning committees are working with the Engineering Science Body of Knowledge (BOK). Flowing into this BOK includes the professional constituency of current professionals, and this feeds into the ABET accreditation criteria. From these criteria, program objectives and program outcomes flow into the assessment plan for measuring and then making curricular modifications as needed to continuously improve the quality of the education students are receiving.

A model being proposed at UT-Tyler is a forward-backward model, looking at the progression of skills needed as students move from one level of coursework to the next. Faculty members collaborating with others teaching prerequisites will allow these professionals to ensure that skills are being taught in prerequisite courses in preparation for higher levels of coursework.

Program assessment involves identification of the goals for student learning. Then, evidence is gathered: either directly (such as papers or tests) or indirectly (such as information gleaned from an interview or survey). Information gathered is then used for program improvement. It is essential that faculty be involved in assessment. An example of the proposed assessment process was shown using Calculus I. Dr. Berman recommended a new blog on the ABET site that was created by Dr. Gloria Rogers, Managing Director for Professional Services at ABET, Inc., and then she opened the floor to questions and discussion.

The Changing Relationship between Two- and Four-Year Institutions

Dr. Smith introduced Dr. Martha Ellis, who spoke on "The Changing Relationship between Two- and Four-Year Institutions."

Dr. Ellis congratulated the group on the work of Tuning, and thanked them for their efforts. She mentioned a report entitled "Rising Above the Gathering Storm" regarding the importance of the STEM fields to the future, and a follow-up report more recently likening the situation to a Category 5 storm. She pointed out that one in five Ph.D. graduates attended community college at some point. Universities are recognizing the importance of the role of the community college and are working to improve relationships.

The focus of the presentation was on state efforts to build relationships between colleges and universities at the administrative level. She pointed out that articulation agreements are very narrow in focus and must be rewritten often, whereas state compacts like the Mechanical Engineering Transfer Compact will address the needs of students transferring to and from all institutions. She stated a belief in the need to "fix the system" rather than relying upon the students to file complaints or challenges at the campus level when classes are not accepted in transfer. She said that the responsibility for correct transfer of courses lies with the institutions, not with the students.

With respect to the core curriculum: State law says that if a student completes the core curriculum at a community college, a university must accept the core toward a degree. Universities must accept up to 66 credit hours in transfer, but are not required to accept more than that.

Successful transfer students need information to help make their decisions. A website, www.transfer101.org, was created to assist students. Universities are listed, and transfer information is received. Students are recommended to see an advisor, and then apply for financial aid. Finally, students are encouraged to follow-through on transfer. The website is available in English and Spanish.

Partnerships between colleges and universities often have policy issues to deal with. It would be advantageous to have statewide agreements like the Mechanical Engineering Transfer Compact rather than individual articulation agreements. Groups of stakeholders are being brought together to work out transfer issues in different areas of the state.

Relationships and open communication are important. All must be concerned with the benefit of students. Community colleges are charged with preparing students for transfer, and universities must be receptive and assist students in making the adjustment. Students must be integrated as soon as possible, so they feel they are a part of the university.

Dr. Ellis described a winner of a Jack Kent Cook Foundation scholarship who, even after graduation, continues to be concerned about the success of community college students when transferring, particularly to selective universities. The winner believes the transfer process is far too difficult for many students. Dr. Ellis asked the audience to suggest ideas about improving partnerships. Suggestions included utilizing technology more effectively, as well as more effectively getting information into students' hands. Too few advisors are available to meet with students on a regular basis. Legislative mandates to universities to accept transfer credit may be another option. Reverse transfer would be helpful in helping students to complete community college degrees. The Coordinating Board is charged with enforcement if universities are not accepting credits from the ACGM as required.

Concluding Discussion

Mary Smith, James Nelson, Sheryl Harris, and Martha Ellis served as a panel for the concluding discussion. Bart Sheinberg acted as the facilitator.

The discussion focused around the need to establish a framework that relates course outcomes to the ability to transfer courses, and pointed out that attention must be paid to the relationship between community colleges and universities and their students. Saad Eways stated that the effort would be worthwhile if it makes it easier for students to be successful. This includes enabling students to take as much credit as possible with them when moving from community college to university. Bart Sheinberg reiterated the importance of improving student success and ease of transfer.

Martha Ellis posed the question to the group as to why some community colleges have chosen not to sign the Mechanical Engineering Transfer Compact. Lynn Peterson stated her belief that, to some, signing the compact feels like the institution is committing to teach all of the courses included in the compact. This is not always possible, particularly among smaller schools.

Mary Smith asked for suggestions from the group on how to clarify what signing the compact really means. Bernard Smith described a "disconnect" between participants and campus administrators and faculty.

Dan Dimitriu suggested a solution for transfer that works well on his campus. There is an advisor who specializes in engineering (among other fields), and students are encouraged to visit this particular advisor for assistance. The advisor also acts as a counselor if students have a personal or other problem they need to process. Engineering instructors and the advisor have formed an effective team with two-way communication about students. He suggested the concept of specialized advisors for students' major fields. Butch Hayes described having a UT-Tyler advisor housed on the campus of Tyler Junior College. Any transfer issues can be dealt with immediately. Advisors are specialists in certain areas, too, but are cross-trained.

Mary Smith discussed the probably that three new compacts will be initiated, and talked about the four new groups being selected for the next areas of Tuning: Biomedical and Chemical Engineering, Biology, and Chemistry. She asked the CC Committee to suggest any advice in beginning new tuning groups.

Butch Hayes expressed concern about what is best for students regardless of where they take their courses. He suggested course outcomes.

Dave Galley talked about the specialized advisor for engineering at his college who has developed a serious health problem. This has resulted in all advising falling to him, as there is no designated back-up. James Nelson expressed that the Mechanical Engineering Transfer Compact will assist with advising, as different curricula will be set out for the different engineering disciplines. Dave Galley discussed the problem of students self-advising at the community college level. He felt that four-year plans should be spelled out more effectively, and he reiterated the importance of having professional advisors to help students. He described three alternatives:

- Students get in to see the advisor and have a positive experience. They are likely to go to see an advisor the next time.
- Students are too busy to go in and wait to see an advisor. They self-advise and may or may not be correct.
- Students come in for advisement to the director of engineering.

Sheryl Harris suggested that there may be a way to utilize technology more effectively. She also stated her belief that faculty must be better ambassadors and work to get information to students. Martha Ellis mentioned that technology can be utilized to get information on courses available within a region.

Saad Eways suggested duplication of efforts, as requests for information and nominations may be delegated and then forgotten. Dan Dimitriu suggested that requests for information or nominations be sent directly to the dean. Martha Ellis reiterated that requests from the Coordinating Board are very official and should be sent to deans, vice presidents, or provosts.

Bernard Smith suggested that some community colleges will not sign because they do not have engineering courses. He gave the example of Hill College, which has a physics teacher but no engineering. Mary Smith described the methods used by the Coordinating Board to select colleges and universities from which nominations were requested. Part of the process included determining whether or not the institution had engineering classes and whether or not the institution had signed the ME Compact.

James Nelson reminded the CC Committee that courses are available online to anyone regardless of where they live. The Coordinating Board also has a tuning website, http://www.thecb.state.tx.us/TuningTexas, and this could be expanded through social networking. Martha Ellis recommended providing a link to the website through Facebook.

Frank Lewis stated that, to some extent, the ME Compact is coming down to a small core. Any courses identified by the Tuning Oversight Council for Engineering will go into the ACGM. The ME Compact is important if the student asks about becoming an engineer, as it tells them which courses to take and what will transfer.

Dan Dimitriu suggested that correlations with ABET outcomes might be placed in syllabi to facilitate transfer into ABET-accredited programs.

Sheldon Wang expressed appreciation for information provided during breakout sessions about common software, such as SharePoint and the TCCNS website.

James Nelson put into perspective the frustrations many feel regarding transfer from community college. He related that an ABET representative had read in the Board minutes from 1947 an agenda item on "How to facilitate transfer." He stated his belief that much progress had been made with the transfer compact and that ABET concerns may still be causing some transfer issues. He talked about the progress that had been made in Maryland but that their strides had fallen apart due to problems with universities accepting transfers.

Wrap-Up and Adjournment

Bart Sheinberg wrapped up the session with a reminder to complete the evaluation. He suggested that members mention whether or not they would like another separate meeting in April, and if so, what needs to be addressed, and what are the next steps to be taken? Dave Galley stated that he believes the group needs a forum on a quarterly basis to discuss implementing the logistics of courses, etc., or the progress made will fall apart. Dan Dimitriu suggested asking four-year institutions to list their requirements of what is needed for students to be accepted for Year Three. He also suggested that ABET accreditation at the two-year level would help with transfer issues. James Nelson said that even the grade point ratio needed for transfer varies from university to university, adding to the confusion.

Bart Sheinberg thanked the CC Committee for their input. A motion was made and seconded to adjourn the meeting at 5:05 p.m.