
Minutes of the Dean's Advisory Council Meeting (DRAFT)
NMSU College of Engineering
August 7-8, 2013
Halliburton North Belt Facility, Houston, TX

Council Attendees

Anthony Medina, Sandia National Laboratories, Council Chair
Frank Bates, El Paso Electric (retired)
Leonard Bloom, Western Refining
Wencil McClenahan, MEA Academy
Richard Montman, Halliburton
Joseph Perea, Exxon Mobil Lubricants & Specialties
Randy Rothschild, Raytheon Company
(telephone participant)
Robert Sachs, Team Technologies
Lisa Webster, EEA Consulting Engineers

College Personnel

Ricardo Jacquez, Dean
Sonya Cooper, Associate Dean
Martha Mitchell, Associate Dean
Patricia Sullivan, Assistant Dean

David Rockstraw, ChE Department Head
Peter Martin, CE Department Head
Satish Ranade, ECE Department Head
Jeff Beasley, ET & SE Department Head
Ed Pines, IE Department Head
Ian Leslie, MAE Department Head

Monica Lopez, Scholarship Coordinator
Tracey O'Neil, Program Coordinator

Welcome

Welcome by Council Chair Anthony Medina, followed by a check presentation by council host, Richard Montman on behalf of Halliburton.

Motion to approve minutes: Frank Bates; seconded by Lisa Webster. Approved.

College Overview

Update on college business by Dean Ricardo Jacquez.

Discussed items: new college initiatives as outlined in his presentation: "College Overview."

Absent

Sylvia Acevedo, Communicard, LLC
Edmund Archuleta, El Paso Water Utilities
Thomas Beall, V-F Petroleum Inc.
Michael Beck, Associated Contractors of New Mexico
David Durgin, Verge Fund
John Galassini, Sunshine Silver Mines Corp.
Jami Grindatto, Intel Corporation
Arthur Hurtado, Invertix
Carl Johnson, Northrop Grumman
David Martinez, MIT Lincoln Laboratory
Margaret Morse, Boeing Company
Bob Myers, Robert G. Myers Consulting
Michael Reischman, National Science Foundation
Sam Romero, Harris Corp.
Jerry Shaw, Volt Information Sciences Inc.
Albert Thomas, Bohannon-Huston
Jeffrey Weiner, IBM Corporation (retired)

ABET update by Associate Dean Sonya Cooper.

Overall, the ABET visit went well. The college is currently working on improving items identified in the ABET report. The college's goal had been to reduce or alleviate all findings in the report by the end of June. According to Jacquez, department heads will now be serving as ABET program evaluators, and it would now be required that each department have an ABET program evaluator.

Peter Martin said CE students would be required to take the test and pass it so they can measure the students' strengths. This test will be made available on the Engineering New Mexico website for others' use.

Medina asked about the strength of the programs' objectives. Cooper said they varied from program to program, and while each department was evaluated, the objectives do not get measured.

Lisa Webster asked about the value of becoming a project manager and having a PNP. The council discussed this and possibilities of having students become certified as project managers. The discussion moved onto to touch on the effectiveness of traditional teaching style in the classroom.

Cooper said faculty have recognized traditional teaching is not working as effectively as it once was and are now committed to learning new techniques to engage students. Jacquez reported this initiative is now a nationwide effort.

Capital Outlay for facility improvement was reported on by Dean Jacquez.

In a meeting Jacquez attended earlier in the year, it was proposed that the college make improvements to Jett Hall and the engineering complex as a whole. The project is currently in the process of being approved with renovation expected to begin in 2015.

Medina asked about the likelihood of the project being approved. Jacquez was confident as he mentioned that projects similar to these usually get sent through with few complications.

Frank Bates brought up for discussion the change in support from the university's new Center for the Arts facility on campus to the College of Engineering. Jacquez said the university was beginning to better appreciate the value engineering and agriculture brought to the establishment. This, he said, was what made him confident the proposed improvements in engineering would get through the approval process.

NMSU Vision 2020 Strategic Plan by Dean Jacquez.

As part of his vision for the university's future, the new president has implemented the NMSU Vision 2020 Strategic Plan. One of the significant changes being made to the previous plan is the university's focus on research. In a meeting with the college deans and several other members from academia serving on the president's council, it was discussed how the university could monitor and implement the president's new initiative.

Medina asked if the dean was responsible for all the key performance indicators outlined in the president's plan. Jacquez confirmed that he would be, but the format for submission could vary.

Other College Activities

Jacquez updated the council on recent activity within the college.

The Jett Hall fire had been a major concern for the college, but renovations were expected to be completed by August 31. Mechanical and Aerospace Engineering Department Head Ian Leslie reported on the effects and challenges the department had faced as a result of the fire. One of the benefits had been a long-overdue update to the Jett Hall computers to replace those lost in the fire. The council asked about the cost of the renovations. Leslie estimated the expected cost to be around \$1.5 million.

Jacquez moved the discussion to faculty raises. Faculty had not seen a significant raise in several years and now the college had 18 to 20 faculty members that were eligible for the faculty equity raises as a result of the tuition increase. The amounts varied depending on performance and on how far below the 90% mark the individual placed.

Industrial Engineering Department Head Ed Pines shared with the council efforts being made to move forward a proposal for developing a professional master's degree. A proposal had been submitted and was in the process of being approved. Pines said that while the proposal has met with some skepticism along the way, it would require no new resources, such as additional courses or faculty, and he is confident it will be approved. He mentioned an Engineering Systems option was being discussed with ET & SE Department Head Jeff Beasley. Cooper said one of the challenges being debated is that this is not a new degree, but she was also confident it would be supported.

Jacquez presented plans for implementing a student technology fee. The fee would satisfy a current need to maintain the labs, computers, software, consumables, data acquisition and staff to support the labs. He proposed a budget of \$1.16M a year to meet this need, which would equate to a fee of \$225 per student per semester. The next step would be to gather feedback from the students. Following an evaluation of the feedback received, he anticipated a year to get the proposal fully approved.

Joseph Perea asked about the relation of the fee to tuition. Jacquez said the fee would lead to an 8% increase in the students' tuition. Richard Montman asked if students were currently responsible for paying any other fees. Jacquez confirmed, but said that money was being used to support university resources not specifically engineering. Bob Sachs inquired how the needs described were currently being met. Jacquez said they were not currently funding these needs. Bates asked about the possibility of the university reallocating funds previously provided to engineering if this fee were implemented. The council discussed the changes to tuition and the effects the technology would have on the students. Perea suggested the university create a sustainable plan to support this kind of need. Jacquez said the process for appealing to the state for additional funding was a complicated process. Three different models currently lobbying for funding have been asked how they will support it. Sachs asked about possible effects should the proposal be rejected by the students as well as the university. Patricia Sullivan suggested the proposed changes may have political ramifications as well. Leonard Bloom inquired about peer institutions' tuition and fee comparisons. The council discussed increased tuition to support this need campus wide or staggering tuition for engineering and business students as a result of consumer demand for these students. Wencil McClenahan asked, in regards to a university-wide tuition increase, why arts and sciences students should be obligated to pay for the expenses of engineering students.

Action Item: Joseph Perea and Anthony Medina will meet with the dean to review the information regarding the proposed tuition fees and future support for the labs in the College of Engineering.

They will include this in their discussion with the President in the fall. Ricardo Jacquez, Anthony Medina, Joseph Perea

Action Item: Student tech fee: provide update in February. Include update on allocation flow down on Tier 3 funding per student credit hours (SCH), use of existing technology fee (\$75), and feedback from engineering students on proposed engineering technology fee. Ricardo Jacquez, Sonya Cooper

Council Business by Anthony Medina.

Bates briefly reported on the council chair and vice chair's 2012 meeting with former university president Barbara Couture and said a summary was available online for further review.

Associate Dean Martha Mitchell outlined the current core equipment needs in the college. She expected the list to evolve with feedback from the department heads.

Cooper presented the peer institute summary on degree requirements by discipline. One problem she cited with the reported data was the part time numbers reflected were incorrect. This was difficult for them to address, however, without knowing where the data had originated. She reported a steady 2-5% increase in enrollment and discussed the number of bachelor's degrees awarded by gender and ethnicity. She said these numbers were comparable to those of their peer institutions. Medina asked if any of the peer institutions progressing more quickly than NMSU could serve as a standard for NMSU to follow. Cooper said with all the peer institutions doing similarly, there was no solid model that would benefit them to follow. She continued with a breakdown of the various programs offered in the departments and degrees awarded by gender and ethnicity.

Action Item: Gap analysis needs to be conducted to assess discrepancies in data presented by Sonya and the numbers she and Martha track internally. Sonya Cooper, Martha Mitchell

Action Item: Conduct gap assessment for each degree program to clarify alignment with industry hiring patterns. Sonya Cooper, Patricia Sullivan, Department Heads

Assistant Dean Patricia Sullivan mentioned that corporate partners frequently utilize readily available data to determine the likelihood of funding one university over another. The council discussed the value of numbers and determinations reported by the company employed by NMSU.

Sullivan and Randy Rothschild presented their assessment on corporate partnerships and how the college could create or grow further partnerships with interested organizations and alumni to further the college's efforts. McClenahan cited channels the college could pursue to further develop their relationship with Boeing. Perea and Montman mentioned similar practices within their organizations. The council discussed the possibilities presented by corporate partnerships and how the college could better advance their efforts.

Action Item: Prepare Partner Network Marketing piece that is compelling, concise and representative of the college capabilities and diversity attributes. Martha Mitchell, Patricia Sullivan

Action Item: Dean's Council representatives and Department academics need to identify respective university partnership metrics and gap assessment to identify opportunities. Dean's Council members and Department Heads

Pines brought up for discussion college programs and the issues associated with facility capacities to support such programs. Some of the issues faced by the growing number of programs within the college are space: availability and preference and people: faculty, graduate assistants and professional staff. He discussed the opportunity of distance education factors as a means of addressing facility capacity concerns. The council discussed how funding was being allocated to address the needs of the college in terms of college programs and facility capabilities. Montman asked about faculty commitments to better address and serve the needs of the college.

Lunch Break

Mitchell presented the college's plans to expand the graduate enrollment. Jacquez brought up for discussion the possibility of establishing a waiver program to support graduate students. He discussed how the overhead rate has been steadily decreasing over the years and how that has affected plans to grow graduate enrollment. The council discussed the path funding follows to get to the college's needs.

New Business by Dean Jacquez.

Jacquez updated the council on a new proposal he had recently presented to the president. They had discussed ideas for acquiring matching funds for the \$10M expected to come from the state designated to support the renovations and updates needed in the college. He appealed to the council for ideas for matching the \$10M needed to support college improvements. Sachs suggested raising the funds through a series of smaller donations from various companies and alumni interested in helping improve the college. Webster mentioned United Way and their support of STEM programs. Montman mentioned in this economic climate there would be challenges to acquiring the amount needed to make the necessary updates to the college. Bates suggested the advantage of creating a solid sales pitch to increase the chance of success when pursuing donors. Montman asked about the likelihood of any funds coming in directly through Las Cruces. Sullivan said that because NMSU was a state institution and falls under state guidelines, they are not permitted to pursue those opportunities. The council proposed naming rooms and labs within the college to generate funds. Perea agreed with Bates that a defined approach may help when reaching out to alumni. Sullivan said that in order to best pursue this, it would have to be a college-wide effort as it would affect donations being given for scholarships, professorships and other college efforts. Medina put to a vote whether the council should make this effort an action item. Jacquez said he would like to have a plan and support in place by February. Montman said it would be important to package the project to highlight the value of all the upgrades the funding would serve. Sachs asked what the college would do with the matching \$10M. Cooper asked Webster for her expertise on renovation projects like the one being discussed.

Jacquez suggested naming the college as a means of pursuing the funding. The council discussed support for the suggestions being offered.

Medina suggested a vote to show whether council would support Jacquez moving forward with his campaign to acquire a matching \$10M or a vote to participate in Jacquez' campaign.

Bates said he would support this concept, and would look forward to seeing further development of the plan to pursue the funding. Medina asked if anyone opposed supporting the concept. Medina called for a vote to support the concept. All present voted in favor of supporting the concept of improving the College.

Cooper discussed the need for establishing programs to better recruit and prepare more engaged students. Establishing programs like these could be utilized to engage freshman and sophomores so they feel more welcome and involved in the college. She suggested implementing a freshman experience program similar to those currently in use at other universities. She invited the council to help by visiting classes and sharing their industry experiences with the students.

Montman said that Halliburton has a similar program with universities in the area. With NMSU being in New Mexico, he said travel could pose a challenge, but the effort was worth pursuing. Cooper said her goal was to see more mentoring between alumni and members of industry and the engineering students and she hoped the council members would be involved in this endeavor.

Action Item: Council members put together ideas on how to help with the College's mentoring program within their own organizations and backgrounds. Council members

Montman said if there was someone within the college who could assist him in putting together a presentation for the students, he would be willing to coming out to help with the mentoring program.

Action Item: Set up a secondary meeting to discuss the involvement in Jacquez' renovation project fundraising.

Next meeting set for February 20-21, 2014.

Meeting adjourned.

Dean's Council Action Items

1. Meet with the Dean to review the information regarding the proposed tuition fees and future support for the labs in the College of Engineering. Include in discussion with the President in the fall. *Ricardo Jacquez, Anthony Medina, Joseph Perea*
2. Student tech fee: provide update in February. Include update on allocation flow down on Tier 3 funding per student credit hours (SCH), use of existing technology fee (\$75), and feedback from engineering students on proposed engineering technology fee. *Ricardo Jacquez, Sonya Cooper*
3. Gap analysis needs to be conducted to assess discrepancies in data presented by Sonya and the numbers she and Martha track internally. *Sonya Cooper, Martha Mitchell*
4. Conduct gap assessment for each degree program to clarify alignment with industry hiring patterns. *Sonya Cooper, Patricia Sullivan, Department Heads*
5. Prepare Partner Network Marketing piece that is compelling, concise and representative of the college capabilities and diversity attributes. *Martha Mitchell, Patricia Sullivan*
6. Dean's Council representatives and Department academics need to identify respective university partnership metrics and gap assessment to identify opportunities. *Dean's Council members and Department Heads*
7. Council members put together ideas on how to help with the College's mentoring program within their own organizations and backgrounds. *Council members*
8. Set up a secondary meeting to discuss the involvement in Jacquez' renovation project fundraising. *Patricia Sullivan/Tracey O'Neil*