
Minutes of the Dean's Advisory Council Meeting
NMSU College of Engineering
September 14-15, 2017
NMSU, Las Cruces, New Mexico

Council Attendees

Randolph Rothschild, Chair
Christopher Long, Vice Chair
Eddie Benz
Leonard Bloom
Kevin Eades
Lou Gomez
Carlos Gutierrez
Daniel Hicks
Christopher Jensen
Michael Johnson
Richard Madrid
Wencil McClenahan
Anthony Medina
Richard Montman
Manny Mora
Bob Myers
Connie Phillips
Mark Robertson
Wayne Savage
Albert M. Thomas
Eloy Torrez
Paul Wantuck
Bud Waters
Carlos Wendler
Daniel Whiteman

College Personnel

Lakshmi Reddi, Dean
Phillip DeLeon, Associate Dean
Sonya Cooper, Associate Dean
Mark Gladden, Development Director
Stephanie Armitage Sichler, Development
Director
Ray Chen, Mechanical and Aerospace
Department Head
David Jauregui, Civil Engineering
Department Head
Thomas Jenkins, Engineering Technology and
Surveying Engineering Department Head
Edward Pines, Industrial Engineering
Department Head
Satish Ranade, Electrical and Computer
Engineering Department Head
Linda Fresques, College Chief of Staff

Welcome

Council Chair Randy Rothschild called the meeting to order and welcomed council members and guests.

- The meeting agenda was approved.
- March 2017 minutes were approved.
- Action items from fall 2017 meeting were reviewed.
- Christopher Long and Manny Mora will develop a Legislative Liaison Committee for the Civil Engineering Department.
- Linda Fresques will provide a list of all engineering organizations to council members to develop liaison/mentor relationships. Student groups will continue to be showcased at future council meetings.

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- Linda Fresques to provide a list of college activities out to council members at the beginning of the semester to facilitate scheduling of member visits.
 - Phillip De Leon and Christopher Long will investigate a system for peer review of proposals and will report back to the council at the fall meeting.
 - Linda Fresques will provide an updated council roster.
 - Linda Fresques and will request updates and information for the council webpage from new members.
 - Rankings will be a topic of discussion at all future meetings.
 - Dean Reddi will provide a case statement for learning communities to be sent to council members.
 - Linda Fresques will investigate telecommunication capabilities for future council meetings

Dean Lakshmi Reddi: View of the College

Dean Reddi led an update discussion on college on his top four priorities that were introduced at the March meeting.

1. Recruiting and Retention

With declining enrollments, the college needs to work on recruitment and retention. Graduate programs across the country are in a decline, but undergraduate programs are not declining quite as badly. At NMSU, engineering enrollment is up in some departments that have been very aggressive in recruiting, but has dropped overall.

Fourth year engineering graduation rates are at about 16 percent nationwide; at NMSU that are at 11 percent.

Our budget is tied to the number of students served, so we need to do better. In response, Patricia Sullivan has been named Associate Dean of Outreach and recruitment.

Retention is also an issue and we need to take good care of our students, which will be the primary focus of the Learning Communities. A space has been designated and through the generous donations from Eloy Torrez, Manny Mora and others, it will become a reality. It directly address retention. Ever student will have a place to go for help no matter what problem they may have.

Bob Myers asked if there are any solutions to help students who get out of sequence with classes offered. Reddi responded that we need to do better advising earlier for students. Also, the Learning Communities will help to identify classes that have a high fail rate and provide intervention to students in those classes to help keep them on track.

Dean Reddi explained an idea started by the Mechanical Engineering Academy industry partnership with capstone projects to give students real-world,

interdisciplinary experience. This also helps with the college ABET accreditation. The college has already received some financial support to expand this idea of integrated design. It might start with freshman design, followed by cornerstone design and culminate with the capstone design in the senior year. It will be piloted beginning in the spring semester

2. Visibility

Effort is being made to improve our “U.S. News and World Report.” The college story is not being communicated well. The ranking is based on surveys by peer assessments. NMSU’s story is not being communicated well. This is exclusively an administrative job. The communications program will be expanded to include regular publication of brochures that feature successes, expansion of electronic dissemination of the “Aggie Ingeniero” electronic newsletter and the addition of a new quarterly publication, “Goddard Broadcast,” which will be widely distributed. The college will also be featured on the “Informed Series,” hosted by Rob Lowe and distributed to the Public Broadcasting System and the American Broadcasting System. It should be ready for distribution sometime this fall.

3. Research Funding and Productivity

The college has begun new initiatives to engage undergraduates in research and laboratory work, but funding is needed. Some research priorities are water, which we are already recognized for, unmanned systems and cyber security.

4. Budget

State appropriations are down and the college lost eight administrative positions in last year’s layoff and six additional positions due to retirements. It’s a good time to redefine processes and do more with less.

Our scholarship funds are one of the college’s biggest assets and we can be more strategic in deploying those resources for recruitment and retention.

Chancellor Carruthers says that the budget for next year looks good and staff may get salary increases.

Bob Myers asked if summer classes were considered to increase four-year retention. Tom Jenkins responded that he helped to draft a policy for summer teaching and the college was approved for beta testing this past summer. The college could offer any course that its enrollment would cover the cost. A revenue sharing scenario was developed to provide additional revenue. The beta from this past summer shows that the college should receive some revenue and that we now have a model that incentivizes summer offerings.

Eddie Binns asked if the college was pursuing distance education. Reddi said that we are lagging behind our peers. Online instructors need to be certified and the college offered \$2,000 to incentivize professors to take the training during the summer. Some 15 professors have now been trained.

Elizabeth Howard: [Learning Communities](#)

Howard gave a presentation on the success of the Learning Communities for the first 20 days of operation this semester, drawing more than 200 students, one-third of whom were repeat customers. The facility has early intervention guidelines for students who appear to be at risk. The facility provides tutoring and mentoring services and will expand services to include lectures, resume reviews, etc. The center is already at capacity for serving students and there is a need for additional Peer Facilitators.

Debra Hicks, NMSU Board of Regents Chair

Regent Hicks, BSCE '83, has been involved with NMSU and the College of Engineering for the past 20 years. She reported that NMSU's enrollment this year is flat, but first year enrollment increased by 11 percent and is considered a big success. The university has invested in marketing efforts both within Las Cruces and outside. The New LCPS superintendent has committed to promote NMSU.

Burt Thomas noted that 120 credit-hour requirement could dilute the profession. Nationally the requirement is 130-131. Regent Hicks stated that ASCE believes it should be in the range of 140-142 credit hours and that the members of the council should get involved in the conversation. It was noted that Experiential Learning is a KPI of the NMSU Mission, but it is in conflict with 4 year graduation, although students can fulfill this requirement through summer jobs or work study.

Dean Reddi noted that he is working with the Physical Science Laboratory to develop more collaboration. Anthony Medina said that he would like to encourage a partnership with Sandia National Laboratories for students to conduct research locally but that student clearance is an issue.

Stephanie Armitage Sichler and Mark Gladden: [Development Report](#)

Sarah Babins was introduced. Babins will develop relationships with young alumni. Current development priorities include Learning Communities Renovations, hiring of learning facilitators and the addition of a directorship. Armitage and Gladden thanked the Dean's Advisory Council members who have a nearly \$60 thousand average of lifetime giving to the college.

Eloy Torrez, who recently made a generous gift to the Learning Communities, noted that he feels very lucky that his life has enabled him with the capacity of giving back. Manny More and Chris Long also made contributions toward the establishment of the Learning Communities.

Mike Johnson, Foundation Board Chair, noted that the Annual fund is going well.

Associate Dean Phillip DeLeon: [Research Report](#)

Several faculty members have received recognition from the University Research Council for their research activity: Professors Bawazir, Khandan and Xu from civil and Professor Brewer

from chemical engineering. DeLeon reported that the College of Engineering had received some very competitive grants. He reported on activities of the Office of Engineering research including initiatives on a lecture series and support for undergraduate research. He noted that desalination posed an excellent research opportunity for NMSU which already has much research going on in this area.

Departmental Presentations

- Satish Ranade, [Klipsch School of Electrical and Computer Engineering](#)
- Edward Pines, [Industrial Engineering](#)

Student Presentations

- American Institute of Aeronautics and Astronautics Design Build Fly Team
- NMSBrew
- American Society of Automotive Engineers Mini Baja Team
- MAES: Latinos in Science and Engineering

Action Items:

- Dean Reddi will provide a report on the Integrated Design pilot program at the next meeting.
- Enrollment, retention and graduation rate data by department college-wide will be reported at the next meeting.
- Updated metrics for the Learning Communities will be reported by Elizabeth Howard next meeting.
- Linda Fresques will publicize the Research Lecture Series.
- The College Fact Book and Strategic Plan will be shared at the next meeting.
- Discussion of collaboration with the Physical Science Laboratory will be reported by Dean Reddi at next meeting.
- Richard Montman will provide spare plane parts to the Design Build Fly Team.
- The first day of the next meeting will be devoted to strategic plan discussion.
- The group would like to have two superstar or new researcher presentations at future meetings and one departmental report.
- It was recommended that Dan Hicks become a member of the council.
- The Dean's Advisory Council members can be solicited for recommendations for speakers for the Bromilow and Lockwood lectures.
- Lab tours might be added on the first day in the morning for those who are present.
- Linda Fresques is to resend an updated council roster to members.
- Members involved in aerospace engineering are invited to discuss and provide aerospace industry skills and needs to Fresques to be passed along to the MAE Department.