

University Research Council
Approved Minutes
August 23, 2013

Present: Jeffrey Arterburn, Susan Beck, Matthias Burkardt, Vimal Chaitanya, Rebecca Creamer, Muhammad Dawood, Joanne Esparza, Richard Fortin, Stephen Hanson, Shanna Ivey, Cathy Kinzer, Jill McDonald, Cathy Ortega-Klett (for Sam Fernald), James Robinson, Steve Stochaj, Mingjun Wei

Absent: Rani Alexander, O.D. Hadfield, Mary O'Connell, Hari Sankaran, Robert Smits,

1. Welcome President Carruthers, Introductions and Presentation

Chair Hanson welcomed President Carruthers and introductions were made followed by a presentation. The presentation included information on how research contributes to NMSU, the value of research, NSF rankings for academic R&D expenditures and NMSU's research potential with suggested process changes and investment in research.

After the presentation President Carruthers spoke to URC about some of the topics that were presented after providing some updates. He said he is delighted to have Dan Howard as the EVP/Provost and they will be working together as a team to support NMSU. Some changes he has made include the reorganizations of some units and the creation of a new council. Under past leadership there was a President's Council and President Carruthers has replaced that with a new council called Presidents Academic Council (PAC). During his ten years as a dean, he found that University Executive Council (UEC) and President's Council (PC) worked with many things but rarely about academic matters such as research and teaching. They were more about policies, political environment, which are all important topics, but the engine for the university really resided in the colleges, faculty and deans. For the past four or five years he felt the engine should be the focus.

PAC includes the President, Provost, Deans, Library Dean and four Vice Presidents – Economic Development, Research, Advancement and Administration & Finance. He is bringing them together once a month for two hours to implement the strategic plan now called Vision 2020. Within Vision 2020, you will find increasing research capacity and graduate enrollment. A few of the meetings have taken place and he currently has Dean Ricardo Jacques working on research review. President Carruthers has heard of problems between pre and post award for 10 years and he would like to see solutions/decisions being made. He mentioned that when he was chairman of the efficiency and effectiveness committee, that issues were looked at and the committee provided suggestions; however, nothing happened to it.

He told URC that he had spoken with Senior Vice President Angela Throneberry and indicated that they needed to solve the issues. She mentioned preferring the customer service model with

each college having a representative for faculty who is expert in that particular college(s), who will be an interface for the faculty to turn to. His view is these people will inhale problems and exhale solutions, if this model is adopted. There is a possibility that pre and post award will be merged; however recommendations will need to be heard first.

Another transformation for the university that he would like to see includes a transfer module for the four two-year schools. He gave an example of all the two-year and four-year programs in Business from all over the state, have articulated the classes that transfer (transfer module) in the freshmen and sophomore years. While syllabi were originally used for comparison, it was finally decided that what the learning outcomes for the two-year schools and the learning outcomes on main campus for a particular class must match.

An example given was BUSA 111 which if looked up on the website, will tell you the 10 or 12 learning outcomes and if the class is taken anywhere in New Mexico, the student must complete 80% of the learning outcomes. Another form for BCIS indicates a student must do all of the following seven, and three of the following six. This has accomplished an understanding between faculty members for what this particular class is. The state requested NMSU do this about eight or nine years ago, but only Business and Early Childhood Development have completed this.

President Carruthers wants to force another element which is using a common taxonomy. That would, for example, make the BUSA 111, be BUSA 111-3. He gave other examples of different course titles being used for classes i.e. Introduction to Micro and Introductory to Micro, be the same for transferable classes. This helps the students to understand that Chemistry 111-3 is actually Introduction to Chemistry (or what the proper name is). He has set a deadline for the end of next year to implement the taxonomy. He feels this will help build a mutual respect between faculty members at the schools and have NMSU following the State's request.

Growing the graduate program in the next several years by 5% to 7% is another goal. He was told the graduate student population is at 20% but has since found out that it is only at 16% of the NMSU student population. He suggested that more research money will be needed for the growth to occur. Dr. Jim Peach the economist is currently working with a team on a 3-tier funding formula that is different from the current one which has one formula that funds the three research universities, the 4 comprehensive universities, and the community colleges. To an economist, this does not make sense. For two or three years, President Carruthers has been leading the effort to create a separate funding formula for the research universities, a separate formula for the comprehensive universities and one for the community colleges which all have different but very important missions. A funding formula has been developed for the moment that he took to the Council of University Presidents (CUP) which are the seven four-year schools. Two schools were not represented but the other five basically embraced the concept. The science funding formula is simple. It says NMSU's state funding is equal to the base funding for 2012 plus added values of \$10 for student credit hour completed, plus \$1000 per bachelors

degree granted, another \$1000 added on if they are in STEM-H, then a factor of 1% for the research budget which was \$1,400,000 last fiscal year in state funding. This 1% will be used for matching funds, for grants and contracts, possibly start-up packages, and other items that we are having trouble funding. This would amount to about \$1.4M. President Carruthers is attempting to convince the legislative finance committee that for NMSU to continue as a research university, the State will need to help. In the past, the State has felt that research support was a Federal responsibility; however Federal funding has fallen. When this model was provided to CUP, they said two things were forgotten, another factor for masters students produced and another factor for the doctoral students produced. The formula was tweaked again so that the more masters and doctoral students produced, the more funding from the state. The State wants to pay for outcomes so President Carruthers said his job is to convince the legislators that this is what is needed. The comprehensive is similar but only goes to the masters level. The two-year colleges have a different formula that looks at certificates and completion. President is aggressively pursuing this new model for NMSU. He is hopeful to get legislative support even though the state is already into budget hearings that this request might be a little late for this year.

Congressman Pearce visited recently and he is not optimistic that there will be new directions for research at the Federal level. He feels they will go back to 2006 funding levels. Based on this, he feels we need to work more with the State.

President Carruthers spoke about Executive Vice President/Provost Dan Howard's paper that he intends on publishing which contends that more universities are having a difficult time coming up with start-up packages. These packages differ by college starting with something as simple as office space and a computer at the College of Business, up to thousands of dollars for engineering and sciences. Provost Howard suggests that we cannot afford for every scientist and engineer to have their own laboratory. General laboratories which can be shared should be considered. Provost Howard has ideas that President Carruthers feels URC should ask about in his upcoming visit with the council. He suggested NMSU might need a new research building that is designed to have not only interdisciplinary work but also multiple laboratories where they are shared.

When President Carruthers came to NMSU, IDC was returned to the colleges at 62% and now it is at 45%. We have asked for many years, where does this money go. One easy answer is the cost of energy and inflation also takes a toll. He isn't sure that they keep a good job of tracking. If you don't know where it goes, it is hard to make corrections. President Carruthers was told that last year Angela Throneberry provided a presentation to URC, for which hard copies were not provided, that indicated where the funds had gone. President said there are some universities that keep all IDC and others where the P.I. gets the majority; however that makes a researcher more involved in space cost. President was also told about P.I.'s grants being charged \$326.00 per year per research graduate assistant from ICT for telephone charges but teaching assistants are not charged. This cost is passed on to the researcher.

Consideration for distance education should be considered as a potential growth area. NMSU is being out-marketed in distance ed. President Carruthers also wants to consider an increase in the admission standards over a four or five year period. This will cause most students to start out at community colleges for the first two years prior to attending university. He also wants to implement a differential tuition rate. The tuition cost would be determined by which college and/or department a student selects for a degree plan. If a degree pays higher in a particular field, then that degree should cost more to achieve. The college of Education would have the lowest tuition cost as teachers are paid less than in other careers. These concepts will have to be approved by the Board of Regents and President Carruthers will need to present the ideas to them. His hopes are that most of the funding from this will go to graduate programs.

President Carruthers came to NMSU in 1968 and hired an associate named Clyde Eastman to work as a team in collaborative research for rural economic development. They were co-researchers for many years. His question was - how to encourage researchers to work collaboratively in interdisciplinary research. Chair Steve Hanson responded that outside of the same department, it becomes difficult due to departments being judged by student credit hour and IDC returning to the department. If faculty members go outside the department to an interdisciplinary program that siphons credit and resources away from the departments so cross department and cross college research right now is a competition with the home department. President asked how to solve this. Chair Hanson said there are a couple of models how to do this. In terms of teaching credit, when you have a funding formula with the state, you can't double book or double dip, but if kept track and rated internally, a system could be created where if an interdisciplinary class is taught by a certain home department, perhaps it could be counted twice - once for the program and once for the department and both given credit. In terms of IDC, some other schools shave off a pool of IDC instead of the home department losing all the IDC that might get run through the interdisciplinary program, in cases where research is interdisciplinary they end up awarding something like 1.5 times the IDC return, and that gets split 75% to home, 75% to program. So instead of either the program or department getting nothing, they get $\frac{3}{4}$ or $\frac{2}{3}$ or something. So there are creative ways you can end up reducing the competition between the programs and departments.

President Carruthers asked if anyone has run an environmental scan which would indicate strengths that NMSU could play to. Vimal Chaitanya indicated that the research strategic plan has an environmental scan both internal and external with a SWOT analysis. He said he is looking for implementation of ideas some of which will require new resources. President Carruthers said his idea of research is driven by faculty members and often times by individual faculty members.

Jeffrey Arterburn said this research driven by faculty is exactly correct and he gave an example of NIH grants. He said the research has to already be done before an award will be given so the researcher has to have initial support for assembling a team who is advancing in some area and see what is needed to target a grant. The team will also have to be accountable to bringing in the

funds at the same time as they couldn't be continually funded to start and not have some success. This is engagement from the ground up to leadership.

Dr. Chaitanya suggested that one of the issues everyone is facing is the ability to reinvest the IDC to support research. The issue is I&G comes with lots of strings whereas overhead can be used for anything else. Many people find it very easy to just use overhead funds that do not necessarily support research. A prime example is the interdisciplinary research grant program which he used to fund 10 people every year at \$50K each as a pilot project. Jeff Arterburn has one of the success stories that came from the IRG program. This year, I could only support two at \$30K and three at \$10K. The faculty members promised they would try to get back what they would have if they had been funded at \$50K but Dr. Chaitanya doesn't believe this is possible. The ability for the colleges or VPR office to reinvest IDC back into research is going to be very important for us to maintain the research enterprise.

In closing, President Carruthers said he will work at the macro level with the State to get funding for research in some capacity and he will work at the State level to get funding for graduate students and STEM-H. He said URC's job is to provide him with some good ideas. He asked for two or three things in the near term that he can actually accomplish to support research. He said that URC should bring these topics to Provost Dan Howard as NMSU has a different environment now because he and Provost Howard are a team that wants to move the university forward.

2. Approval of Minutes / Notes for March 3, 2013; April 8, 2013; May 2, 2013; August 9, 2013

Minutes were approved with correction to May 2, 2013.

3. Other

Member suggestions from President Carruthers' meeting included:

- a. Ask Provost Howard questions including cutting startup costs; faculty incentives for research; tuition waivers or reduction; IDC distribution; transparency with IDC and accountability; get Provost's position on URC presentation prior to selecting the three items President asked for;
- b. Past Chair Shanna Ivey said some grad programs don't require a research program just coursework. She suggested that we need to be specific and ask what they will do to replace faculty in departments with degree programs that require research funding to fund graduate students.
- c. Chair Hanson requested members to provide specific ideas for incentives that can be made to the next URC meeting

Minutes by Frances Schumacher