



UNIVERSITY OF NEBRASKA-LINCOLN COLLEGE OF ENGINEERING



FACULTY WORKLOAD AND EVALUATION TASK FORCE

FINAL REPORT
March 2018

TASK FORCE MEMBERS

Shannon Bartelt-Hunt (CIVE) chair
Chris Bourke (CSE)
Bruce Dvorak (CIVE/BSE)
Ned Ianno (ECE)

Gustavo Larsen (CBME)
Jung Yul Lim (MME)
Erica Ryherd (DSAEC)

OVERVIEW

Charge to the Committee

The Charge to the Committee was provided by the College of Engineering (COE) leadership. The charge provided was to identify best practices in the college for allocating faculty time to teaching, research, and service activities (planning), documentation of accomplishments (reporting), and review of productivity (evaluation). The outcome should be clear goals of policy and procedures that recognize quality of activities.

Background Information

To meet the committee's charge to evaluate best practices in planning, reporting and evaluation, data was collected and is presented in this section. The purpose of this data is to provide context for the committee's recommendations related to the allocation of faculty time, documentation of accomplishments, and review of productivity. The data presented in this section was provided to the committee by the College of Engineering Dean's office and includes faculty demographics, faculty productivity and data reported by the College to ASEE. Additional information on unit procedures was collected by the committee members. This section provides a snapshot of the current faculty demographics in the college, provides approximate relationships between research and teaching productivity and apportionment, describes UNL apportionment categories, and summarizes current evaluation and planning processes used by COE Units. A summary of this background data is provided at the end of this section.

Faculty Demographics in the College of Engineering

In the Fall of 2017, a total of 253 faculty were associated with units in the College of Engineering as shown in Table 1. Of these faculty, 212 (83%) are T/TT faculty, while 18 (7%) are research faculty and 22 (8%) are practice faculty. Faculty demographics for each COE unit are listed in Table 1. Note that these are faculty associated with COE units, and some (such as in CSE) may have faculty lines in other colleges.

Table 1. Fall 2017 Faculty Demographics in all COE units

	American Indian / Alaska Native		Asian		Black-Non Hispanic		Hispanic/ Latino		Non-resident Alien		White-Non Hispanic		Missing		Total	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Professor	0	1	3	24	0	0	0	4	0	1	4	54	0	1	7	85
Associate Professor	0	0	6	19	1	0	0	0	0	0	8	32	0	0	15	51
Assistant Professor	0	0	2	12	0	1	0	1	2	10	7	19	0	0	11	43
<i>Tenure / Tenure Track Subtotal</i>	0	1	11	55	1	1	0	5	2	11	19	105	0	1	33	179
Equivalent Rank Faculty	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Research Professor (all ranks)	0	0	1	0	0	1	0	0	0	1	3	12	0	0	4	14
Professor of Practice (all ranks)	0	0	0	1	1	0	0	0	0	1	6	13	0	0	7	15
<i>Total</i>	0	1	12	56	2	2	0	5	2	13	28	131	0	1	44	209

Based on the data reported in Table 1, the percentage of COE faculty that are female or a member of a minoritized group underrepresented in STEM (underrepresented minority or URM) can be found in Table 2. Note that for these calculations, URM faculty were defined as American Indian/Alaska Native, Black-Non-Hispanic, or Hispanic/Latino.

Table 2. Percentage of female and URM faculty in COE units

	Female faculty	URM faculty
Professor	7.6%	5.4%
Associate Professor	22.7%	1.5%
Assistant Professor	20.4%	3.7%
<i>Tenure / Tenure Track Subtotal</i>	15.6%	3.8%
Equivalent Rank Faculty	0.0%	0.0%
Research Professor (all ranks)	22.2%	5.6%
Professor of Practice (all ranks)	31.8%	4.5%
<i>Total</i>	17.4%	4.0%

Table 3. Data from Big Ten institutions from ASEE Online Profiles (2016) on female and minority faculty

	Female Tenure Track Faculty as % of all TT Faculty	Female Full Professors as % of all Full Professors	Minority Tenure Track Faculty as % of all TT Faculty	Minority Full Professors as % of all Full Professors
Michigan	20.0%	12.3%	32.5%	27.5%
Purdue	18.5%	11.5%	36.8%	34.9%
Rutgers	18.1%	13.0%	44.2%	34.5%
Wisconsin	17.5%	13.0%	24.0%	22.7%
Illinois	16.9%	9.2%	33.7%	31.5%
Ohio State	16.4%	11.4%	40.9%	39.4%
Michigan State	16.1%	8.7%	45.7%	40.2%
Penn St	14.9%	11.4%	30.0%	27.9%
Nebraska	13.8%	3.3%	43.3%	42.2%
Minnesota	13.6%	10.9%	31.4%	25.6%
Maryland	13.3%	7.1%	28.2%	26.9%
Iowa	12.4%	9.7%	38.9%	40.3%
Northwestern	12.1%	9.8%	28.4%	26.2%

As shown in Table 3, based on data available from Big Ten institutions in the ASEE Online Profiles (<http://profiles.asee.org>), in 2016, Nebraska was 9th out of 13 Big Ten institutions in the percentage of female tenure-track faculty with 13.8%, a number which compares reasonably well with the 15.6% reported in Table 1 from Fall 2017. By comparison, Michigan was the highest with 20% and Northwestern was the lowest at 12.1%. Nebraska also had the lowest percentage of female full professors among Big Ten institutions, with 3.3% as reported by ASEE in 2016. By comparison, Wisconsin and Rutgers were highest with 13%. It should be noted that the percentage of minority faculty are also reported by ASEE, and Nebraska was 3rd with 43.3%; however, it seems that Asian faculty were included in this determination of minority faculty. Although they are a minority group with respect to U.S. population demographics, they are not underrepresented with respect to STEM disciplines. This difference in definitions complicates the comparison with the data presented in Table 2.

Table 4. Data from Big Ten institutions from ASEE Online Profiles (2016) on teaching and research faculty

	Non-tenure track teaching Faculty	Non-teaching research Faculty
Wisconsin	122	264
Ohio State	113	150
Penn St	65	62
Minnesota	60	15
Northwestern	58	0
Maryland	56	242
Illinois	49	194
Purdue	41	143
Nebraska	25	57
Michigan State	25	58
Iowa	15	0
Rutgers	9	32
Michigan	0	0

As shown in Table 4, Nebraska reported 25 non-tenure track teaching faculty, which was 9th in the Big Ten. Wisconsin was ranked first with 122. This number reported for Nebraska agrees well with the number of practice faculty reported in Table 1. The number of non-teaching research faculty reported by Nebraska to ASEE in 2016 was 57, which was 8th in the Big Ten. By comparison, Wisconsin was 1st with 264. This number is larger than the number of research faculty reported in Table 1, which is 18, a difference that may be due to how ASEE defines these faculty.

When comparing Nebraska to a regional peer group of 11 universities including Purdue, Colorado, Iowa State, Illinois, Colorado State, Ohio State, Kansas, Minnesota, Iowa and Missouri, Nebraska ranks 8th out of 11 institutions in the percentage of female tenure track faculty (Purdue was ranked first with 18.5%) and 11th out of 11 institutions in the percentage of female full professors (Colorado was first with 16% (Table 5). The percentages of minority tenure track faculty and fully promoted faculty are also provided in Table 5, and Nebraska ranked 2nd and 3rd, respectively; however, as in Table 3, this data appears to include minority groups not underrepresented in STEM.

Data on teaching and research faculty across this peer group are reported in Table 6. Nebraska was 8th in the number of non-tenure track teaching faculty (Colorado was 1st with 118) and 6th in the number of non-teaching research faculty (Illinois was 1st with 194).

Table 5. Data from regional institutions from ASEE Online Profiles (2016) on female and minority faculty

	Female Tenure Track Faculty as % of all TT Faculty	Female Full Professors as % of all Full Professors	Minority Tenure Track Faculty as % of all TT Faculty	Minority Full Professors as % of all Full Professors
Purdue	18.5%	11.5%	36.8%	34.9%
Colorado	18.2%	16%	24.5%	22.3%
Iowa State	18.0%	15.2%	41.2%	32.1%
Illinois	16.9%	9.2%	33.7%	31.5%
Colorado State	16.5%	11.5%	Not provided	Not provided
Ohio State	16.4%	11.4%	40.9%	39.4%
Kansas	14.7%	6.3%	27.6%	25.0%
Nebraska	13.8%	3.3%	43.3%	42.2%
Minnesota	13.6%	10.9%	31.4%	25.6%
Iowa	12.4%	9.7%	38.9%	40.3%
Missouri	11.1%	5.4%	50.5%	58.9%

Table 6. Data from regional peer institutions from ASEE Online Profiles (2016) on teaching and research faculty

	Non-tenure track teaching Faculty	Non-teaching research Faculty
Colorado	118	184
Ohio State	113	150
Iowa State	71	50
Minnesota	60	15
Illinois	49	194
Purdue	41	143
Missouri	26	19
Nebraska	25	57
Iowa	15	0
Kansas	11	4
Colorado State	8	95

Current Productivity and Workload in the Departments/Units

To evaluate COE faculty workload and to correlate faculty workload and apportionment, data were provided by the COE business office. This data set, which spanned six years, provided information on average annual expenditures, number of courses taught, and number of student credit hours taught for every faculty member employed by the COE over the 2012-2017 fiscal years. The data were provided by the COE business office and data were then de-identified before being given to the task force. The average annual expenditures reported in the dataset were calculated over the years of service in the database (spanning from one to a maximum of six years).

If a faculty member had less than one year of service, no average expenditures were reported and these faculty were excluded from any analysis where average research expenditures were compared against other metrics (i.e., these faculty were not represented as having \$0 expenditures). There were 284 individual faculty entries in the database, therefore this database includes faculty that are no longer in the COE. The database included data on T/TT faculty, research faculty, practice faculty and lecturers.

In addition, the taskforce evaluated data provided by the COE business office on the metrics provided to US News and World Report, annual COE research expenditures, and the average research expenditures per T/TT faculty for the Big Ten institutions.

Research Productivity and Workload.

Data on research expenditures in the College of Engineering from FY01/02 through FY 16/17 by COE departments is provided in Figure 1. As shown in this Figure, research expenditures peaked in FY 10/11 with \$37.5M and declined through FY 13/14 to \$28.3M. FY 16/17 expenditures by COE departments were \$31.2M. Table 7 provides expenditure information for FY 16/17 by department and funding source. In FY16/17, approximately 45% of COE funding is from federal sources, 16% from state and local sources, 23.5% from foundations and 15.5% from industry.

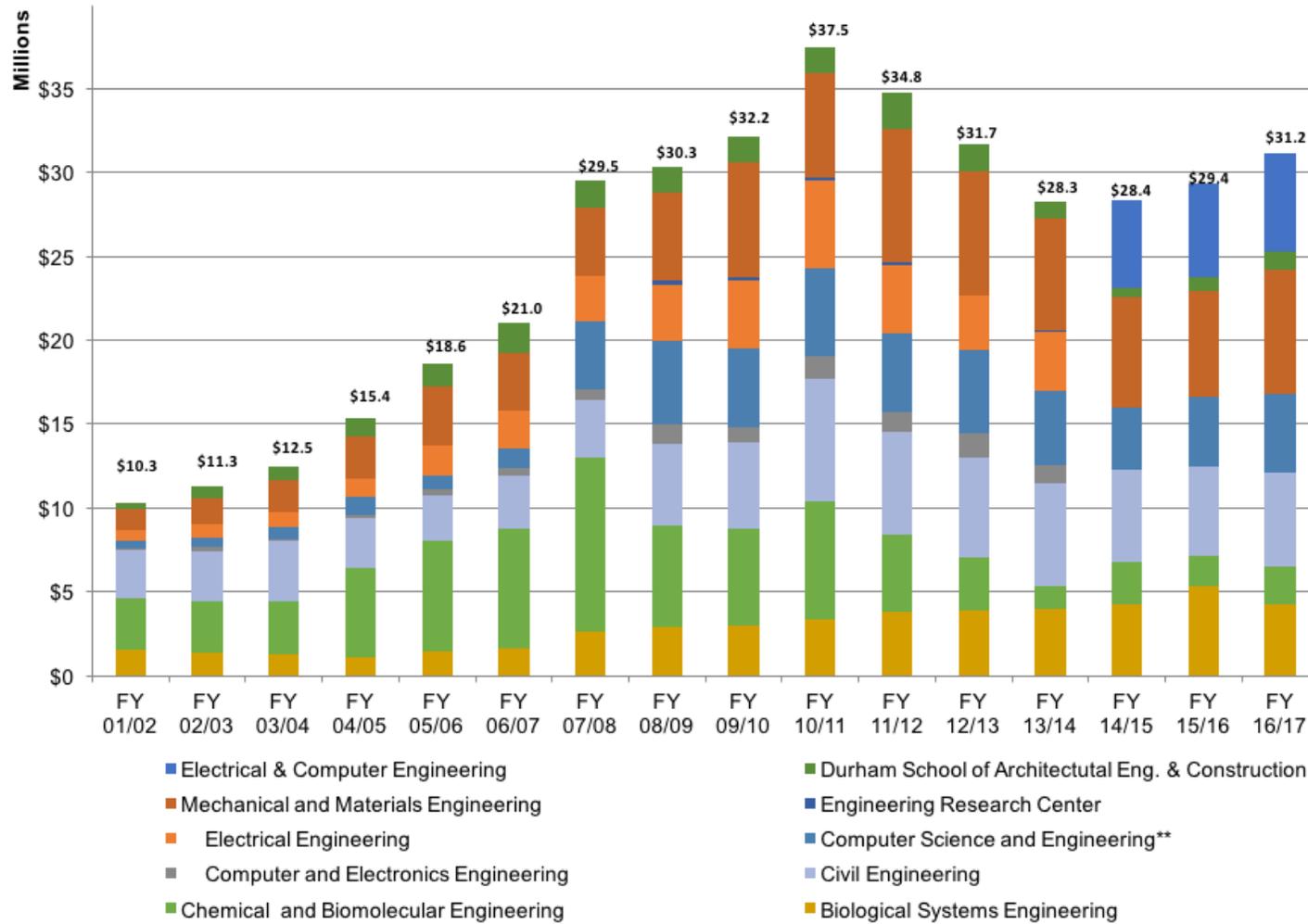


Figure 1. UNL College of Engineering Expenditures by Fiscal Year

Table 7. Expenditures by Source for FY 16/17

	Federal	State	Local	Associations and Foundations¹	Industry	Total
Biological Systems Engineering	\$1,738,425.91	\$395,752.08	\$121,151.79	\$966,380.62	\$993,052.94	\$4,214,763.34
Chemical & Biomolecular Engineering	\$382,271.94	\$2,453.02	\$33,161.22	\$76,811.02	\$1,826,386.73	\$2,321,083.93
Civil Engineering	\$937,347.26	\$1,687,843.67	\$149,965.20	\$2,280,959.69	\$475,393.57	\$5,531,509.39
Computer Science and Engineering**	\$2,668,222.64	\$297,906.83	\$0.00	\$1,777,911.09	\$3,962.42	\$4,748,002.98
Electrical and Computer Engineering	\$4,542,734.43	\$156,057.17	\$0.00	\$383,088.05	\$784,098.92	\$5,865,978.57
Engineering Research Center	\$0.00	\$10,500.00	\$0.00	\$0.00	\$0.00	\$10,500.00
Mechanical and Materials Engineering	\$3,364,161.14	\$1,934,287.32	\$0.00	\$1,405,967.10	\$677,927.66	\$7,382,343.22
Durham School of Architectural Engineering and Construction	\$327,617.30	\$250,532.54	\$0.00	\$437,637.59	\$76,626.08	\$1,092,413.51
Total	\$13,960,780.62	\$4,735,332.63	\$304,278.21	\$7,328,755.16	\$4,837,448.32	\$31,166,594.94
Percent	44.8%	15.2%	1.0%	23.5%	15.5%	100.0%

¹ Includes funding sources such as Boy's Town, NE Cattlemen, NE Environmental Trust, and NSRI

Data collected from ASEE shows the ranking of the UNL COE compared with Big Ten engineering colleges (Table 8) and regional peer institutions (Table 9) in terms of expenditures and expenditures per T/TT faculty member. Nebraska ranks 13 out of 13 in the Big Ten with approximately \$32.8M in total expenditures and \$156,419 per T/TT faculty member. When compared to regional institutions, Nebraska is 9th out of 11 in total expenditures and 10th out of 11 in terms of expenditures per T/TT faculty member.

Table 8. Total expenditures and expenditures per T/TT faculty member (Big Ten). Data from ASEE Online Profiles (2016)

	Expenditures	Expenditures per T/TT faculty member
Michigan	\$295,646,000	\$722,851
Purdue	\$259,111,345	\$647,778
Illinois	\$227,584,893	\$504,623
Wisconsin	\$141,939,724	\$576,991
Maryland	\$140,458,959	\$550,819
Ohio State	\$128,840,000	\$478,959
Minnesota	\$122,194,826	\$526,249
Northwestern	\$114,089,862	\$600,473
Penn St	\$100,096,457	\$285,990
Rutgers	\$56,476,000	\$379,034
Michigan State	\$44,693,242	\$244,589
Iowa	\$45,625,665	\$403,767
Nebraska	\$32,848,045	\$156,419

Table 9. Total expenditures and expenditures per T/TT faculty member (regional peer institutions). Data from ASEE Online Profiles (2016)

	Expenditures	Expenditures per T/TT faculty member
Purdue	\$259,111,345	\$647,778
Illinois	\$227,584,893	\$504,623
Ohio State	\$128,840,000	\$478,959
Minnesota	\$122,194,826	\$526,249
Colorado	\$97,551,458	\$508,081
Iowa State	\$94,520,571	\$385,798
Colorado State	\$70,267,916	\$611,025
Iowa	\$45,625,665	\$403,767
Nebraska	\$32,848,045	\$156,419
Missouri	\$21,367,224	\$215,831
Kansas	\$15,253,448	\$131,495

To evaluate the general relationships between measures of faculty productivity and faculty apportionment, the research expenditures for each faculty member and the percent FTE for T/TT COE faculty members were plotted (Figure 2). As described above, this dataset was provided by the COE business office and included data from the 2012-2017 fiscal years. Although there are likely to be some errors in this data, there is no apparent relationship between % research apportionment and research productivity as measured by annual average research expenditures.

Table 10 provides information from the database provided by the COE on the percentage of faculty with a research apportionment with low (< \$15,000) or no average annual research expenditures. Based on this information, over the past six years, 29/188 (15%) faculty with a research appointment have had \$0 annual average research expenditures and 59/188 (27%) have had less than < \$15,000 for average annual research expenditures. Note that for this analysis, only faculty with > 1 year of service were included.

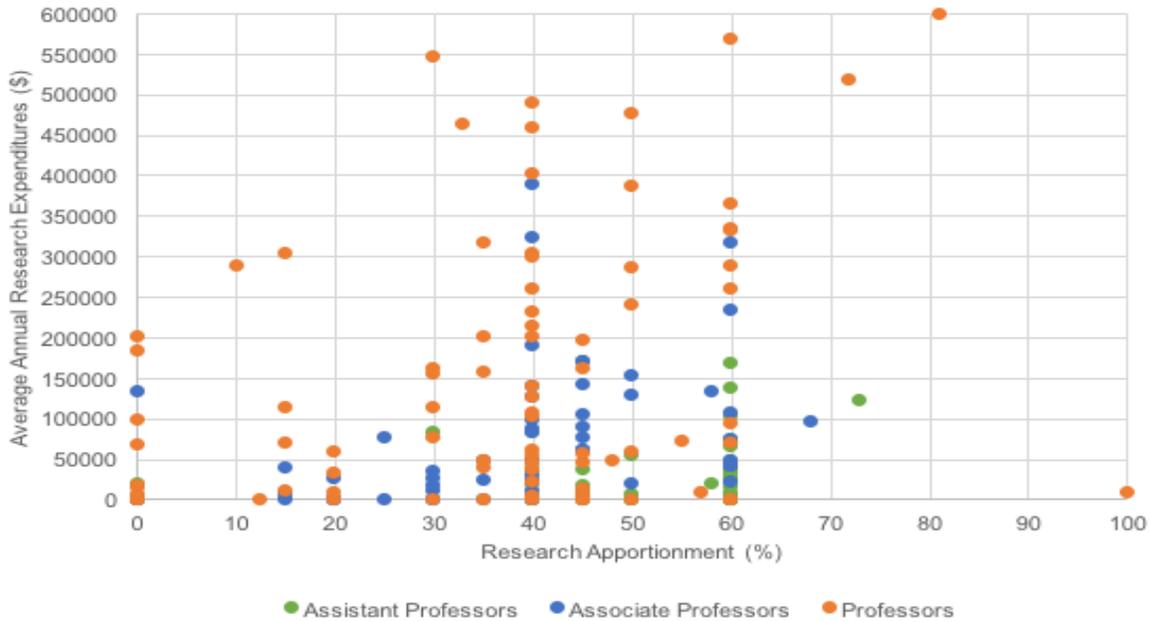


Figure 2. Relationship between average annual research expenditures and % research apportionment by rank for T/TT faculty. Note that approximately 5 faculty with expenditures >\$600,000 were excluded from this analysis to better show data trends.

Table 10. Faculty with Research Appointments with Low or No Research Expenditures

Rank	% with \$0 annual average expenditures	% with <\$15,000 annual average expenditures
Assistant Professor (>1 year of service)	4/40 (10%)	9/40 (22.5%)
Associate Professor	12/58 (20%)	18/58 (31%)
Professor	10/79 (12.5%)	19/79 (24%)
Research Faculty (all ranks, >1 yr of service)	3/11 (27%)	6/11 (54.5%)
Total	29/188 (15%)	52/188 (27%)

Teaching Productivity and Workload

From the same dataset spanning FY 12-17, the relationship between a measure of faculty teaching effort and the teaching FTE for COE faculty members were plotted. Figures 3 and 4 show the relationship between teaching apportionment and teaching load in terms of average number of courses taught per year (Figure 3) and student credit hours (SCH) taught per year (Figure 4). There is also no discernable trend between teaching apportionment and teaching load in terms of either courses taught or SCH. Table 6 shows the average number of courses (excluding independent study or thesis/dissertation hours) taught by T/TT faculty in each COE unit.

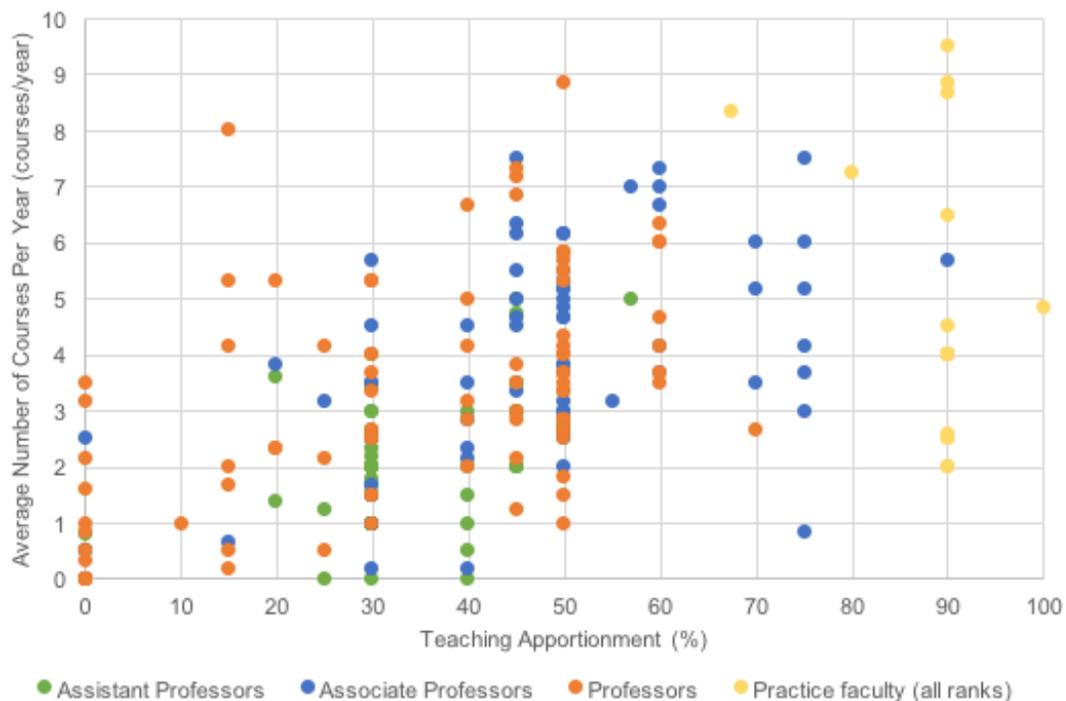


Figure 3. Relationship between number of courses taught per year and % teaching apportionment.

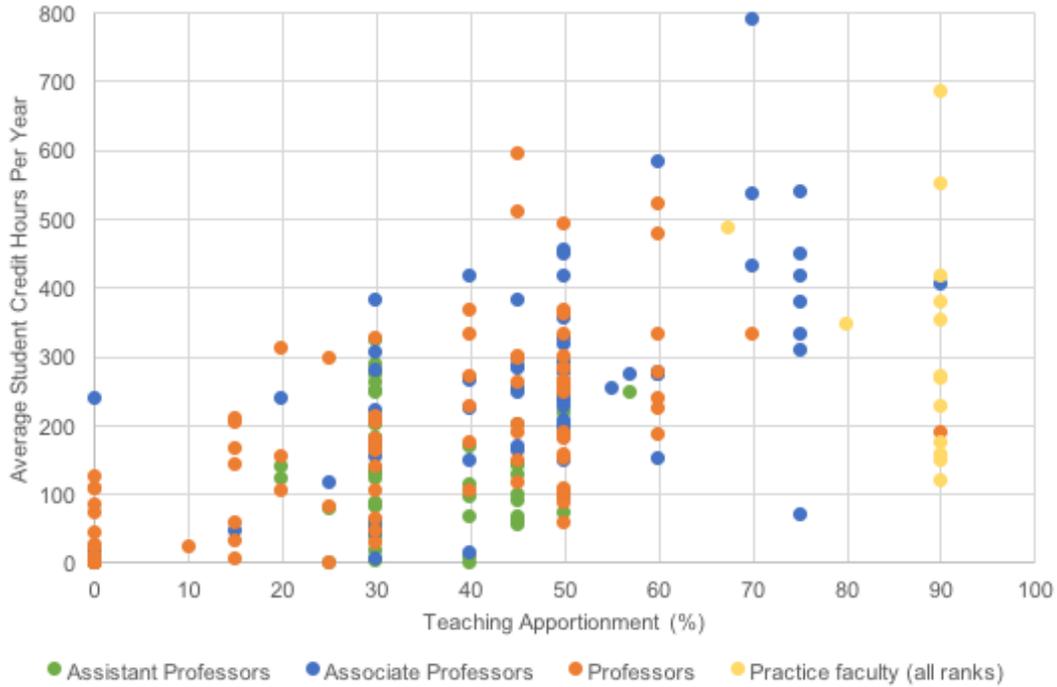


Figure 4. Relationship between number of courses taught per year and average annual student credit hours taught. Note that this figure excludes approximately 3 faculty with >800 average SCH per year to better show data trends.

Table 11. Average courses per year taught by T/TT faculty in COE units

Unit	Courses/Year	SCH (incl X99)/Year
BSE	2.94	179.0
CBME	2.21	146.0
CIVE	3.98	254.0
CSE	4.41	213.0
DSEAC	4.39	260.0
ECE	3.06	203.0
MME	2.95	264.0

Other COE factors influencing workload

To further investigate the relative ranking of the COE in terms of total expenditures and expenditures per T/TT faculty member in the Big Ten and among regional intuitions, the task force investigated other factors that may serve as barriers to

competitiveness in securing extramural research funding including the number of research centers and the F&A return rate to PIs.

Faculty productivity in the area of research, as measured by external funding obtained (or spent) per year, could be improved via implementation of effective institutional policies and planning related to establishment of research centers as federally funded research centers provide a significant boost to research productivity indicators. One clear example in the Big Ten is the University of Iowa's \$97M HUD-funded center, in which the College of Engineering (COE) plays a pivotal role. (<https://www.engineering.uiowa.edu/news/ui-flood-center-benefit-97-million-hud-grant-control-floods-nutrient-pollution>). Currently the COE is the affiliated administrative unit for only two centers: the Mid-America Transportation Center (MATC) and the Nebraska Transportation Center (NTC). COE faculty have significant activities in other centers, including the Nebraska Center for Materials and Nanoscience (NCMN), the Nebraska Center for Energy Science Research (NCESR), the Center for Electro Optics, the Nebraska Water Center and the Robert B. Daugherty Water for Food Global Institute. A list of centers at UNL is available at <https://academicaffairs.unl.edu/academic-program-planning/centers>.

Another important incentive that PIs and co-PIs receive is the percentage of indirect costs coming back to them, funds that are generally used in a discretionary manner. F&A funds may be the difference between hiring two, instead of one Ph.D. student to support a specific research program, or being able to provide a competitive postdoctoral associate salary to a qualified candidate. Our taskforce started collecting information on these two items (Centers and F&A return), until one of our peer institutions expressed that, in their view, such information should only be requested by our Sponsored Programs office directly. Thus, data collection was halted. While only incomplete information could be obtained directly and voluntarily from staff and faculty members from some of our peer institutions, the taskforce still believes that the COE should seriously consider, in coordination with other administrative units, to determine how to effectively foster the creation of Centers and Institutes capable of competing nationally for Federal funds and how to reward individual PIs more effectively via the implementation of fair and equitable F&A redistribution formulas.

With regard to F&A return, the COE typically recovers 1/3 of the total indirect costs (IC) charged to grants. As an incentive, the PI receives 20% of the COE's IC allocation <https://engineering.unl.edu/employee-resources-engineering-policies/>. The current on-campus research IC rate is 53.5%. This means that the PIs' accounts are allocated $53.5\%/15 = 3.57\%$ of the grant's amount subject to full IC recovery.

On October 25, Dr. Arun Somani, associate dean of Research at Iowa State University's COE, communicated that their on-campus current IC rate (52.0%), as incentive, the PI receives 15% of it, i.e. **7.8%**. If funding comes through a research center, then the 7.8% figure may decrease, as centers recover 10% as a combination of IC otherwise distributed to the home department of the PI (45%, without specifying as to whether that is the PI's department, or the department + ISU's COE), and the PI's allocation. In regards to funding associated with centers, Dr. Somani

indicated that “it varies from year to year”, but roughly half of the research expenditures are managed by an organized center.

On the same day, the same issues were discussed over the phone with Ms. Christine Wilson, from PSU’s Office of Engineering Research administration. She indicated that of their current on-campus research IC rate at PSU (58.3%), the college gets 12% x IC rate. The Dean’s Office keeps 2%, and 10% is returned to the PI’s home department. She also said that most departments in their COE “return all of their **10%** to the PI”, i.e. **5.83%**. No information was provided on the issue of PI-initiated vs. Center type grants at PSU.

An interesting approach, one that puts pressure on colleges to raise extramural research funding, has been in place at Ohio State for more than a decade, according to Marie Mead, executive director of Finance and Business Operations at OSU’s COE. Colleges are only allocated the *marginal positive change* in IDCs annually. For example, if a total of \$1,000 in IDCs were generated in year 1, and \$1,500 in year 2, their COE receives 97.4% of \$500 (the small 2.6% “tax” goes into the university library system). If the college raises less IDC than in the previous year, then the college owes money back to the university. Ms. Mead stated that the system seems to have worked “fine” for OSU’s COE, but not so well for other colleges that are strongly dependent on a few “star researchers”. As of FY16, their COE has implemented an IDC return policy to academic units based on a 2-year moving average, to try to buffer potentially abrupt changes in their IDC return figures. It returns 25% to the grant-originating department(s), retains 50% for various research projects, and injects the remaining 25% into Engineering Research Operations, the latter being the organizational unit managing the COE’s research centers. There is ample freedom and variance as to how each academic unit within their COE uses its 25% share. Some seem to be quite generous to the PI that generated the funds, and some use it for various purposes, e.g. the strengthening of startup packages.

Additional information can be retrieved online from other regional institutions (e.g., University of Kansas: <http://policy.ku.edu/research/facilities-costs-return>), that point to PI incentives above 5% on F&A. In summary, this Task Force believes that the COE, in collaboration with the Office of Research, needs to devise a strategy aimed at identifying and addressing institutional issues that may work against the research productivity of its faculty. To justify the effort, the COE could perhaps develop some form of simple “research potential” metric of its last n tenure-track and/or tenured hires at the start of their appointments, and compare it with a similar statistical group from say, Iowa State. This Task Force speculates that it is unlikely that such a metric will produce the factor of (roughly) 3 difference seen in the number of extramural research dollars generated per faculty member.

UNL Apportionment Categories

The activities included in each apportionment category at UNL are defined by the University and are available through the Office of the Senior Vice Chancellor for Academic Affairs. The COE cannot adjust the definition of activities within a given apportionment. Additionally, the COE and units should ensure that all activities are credited to the appropriate apportionment category during annual reviews and P&T evaluation. The definitions of apportionment can be found in Appendix A.

Current Unit Practices for Evaluation and Planning

A matrix defining current practices in planning and evaluation for each unit in the COE is provided in Appendix B. In addition, the planning and evaluation practices for each unit are summarized below.

Biological Systems Engineering

Annual Evaluation. In January, each IANR faculty member enter their information within an electronic system (activity insight). Some types of data are electronically added by IANR (e.g., grants and expenditures, teaching data, apportionment). This electronic system allows for open-ended presentations of the impact of the faculty member, requires faculty to list specific goals for the next year related to each portion of his/her apportionment, and requires the faculty member to provide a space-limited summary of their accomplishments.

The chair reviews the annual report, and prepares an evaluation form that is discussed jointly with the faculty member in a face-to-face meeting, typically 30 to 60 minutes in length.

Currently the CASNR teaching apportionment formula (see <https://casnr.unl.edu/teaching-casnr> for more information and a spreadsheet calculator) is calculated by CASNR and is listed on the faculty member's annual report. There is no formula for research FTE and for extension FTE.

The faculty member discusses the apportionment with the chair each year, and in some cases the apportionment may be changed. Each faculty member in IANR has a written position description, noting specific teaching, research and extension expectations which are aligned in the position description with the apportionment percentage. In addition, there is an apportionment revision form that can be used to modify a faculty member's apportionment.

Evaluation of Non-Fully Promoted Faculty: Additional Considerations. For all non-fully promoted faculty, the departmental P&T committee provides an assessment of their annual report data on an annual basis. The faculty member is provided a letter from the P&T committee commenting upon their strengths and areas where improvement may be useful. The letter discusses the faculty member's progress toward promotion (and as appropriate, tenure). This letter is provided as input to the review by the department chair.

Course planning. Currently this is an ad hoc process operated by administration. In recent years, it has consisted of using past year's teaching schedule, anticipated course demand, and incorporating teaching desires of individual faculty members. The Department plans to move to developing a five-year teaching plan based on collaborative curricular planning by faculty discipline groups.

Chemical and Biomolecular Engineering

Evaluation of Individual Faculty, Workload Planning, and Apportionment. Each year, every faculty member is asked to provide a written self-evaluation (SE) document to the CBME Department Chair, with a typical deadline set around the months of February to April, to report on activities from the previous calendar year. Currently, there is no specific format or “self-evaluation form” being used to complete this exercise. Faculty members are expected to report on their achievements and workloads in all areas of their apportionment. In the past, the CBME utilized multipage self-evaluation forms provided by the College of Engineering (COE), but that practice was discontinued several years ago.

Approximately during the two to three months that follow the submission of the annual SE to the chair, a one-on-one meeting between the faculty member and the chair takes place, with the specific goal of discussing performance and workload during the reporting year. A change in the faculty member’s apportionment is negotiated at the time of this meeting, based on projections mutually agreed upon with regard to research, teaching and service workloads and departmental needs. Within the following few weeks, the chair sends to the faculty member his/her performance assessment in the form of a letter, in which the agreed-upon apportionment for the following academic year, if modified from the previous year, is specified. The chair then decides on issues such as salary raises independently, and communicates with the COE pertaining such matters without any further faculty participation. “Salary Notification” letters are then received by CBME faculty members within a few months, and before the start of the next academic year.

Historically, certain considerations have been taken into account with regard to individual faculty effort in a consistent manner. For example, the development and the teaching of a new course, or a course taught for the first time, is generally accepted as requiring roughly twice the effort as teaching a course that has already been taught. Also, teaching two sections of a lecture course is considered to require twice the effort as a single section.

With regard to research, there are no “hard and fast rules” in place. “Three chairs ago,” the concept that raising a baseline of \$100K per year in extramurally funded research and publishing two peer-reviewed journal articles was to be considered adequate-or-better faculty performance was promoted, and in a way, generally accepted by most CBME faculty members. There is no written policy describing this.

Evaluation of Pre-Tenure Faculty: Additional Considerations. During the 2013-2015 biennium, a P&T subcommittee composed of three full CBME professors were charged with the task of annually evaluating one faculty member in the last 2-3 years of their P&T clock. This P&T subcommittee then presented their findings to the whole body of CBME faculty members eligible to vote on that particular case. There is a similar P&T subcommittee structure still in place.

The department works with and aligns all other items (e.g., requests of external letters of reference) with the COE, as the tenure clock expires. For many years during the '90s and early 2000s, two independent letters, namely one from the chair and one from faculty members eligible to vote on local matters of P&T, were issued.

Civil Engineering

Annual Evaluation. By January each faculty member is asked to prepare an annual evaluation form developed by the chair to describe activities in teaching, research and service over the prior calendar year. A copy of the COE P&T CV is attached, with activities from a rolling five-year period highlighted. Other materials may also be requested by the chair (i.e., course syllabi). In March through May, the Department Chair schedules a meeting with each faculty member and provides a written evaluation report of the faculty members activities in teaching, research and service. The faculty member's performance is rated on a scale of Excellent, Very Good, Satisfactory, Marginal and Unsatisfactory and research, teaching and service can each be rated individually on this scale.

For all pre-tenure faculty, the faculty are also evaluated on an annual basis by the departmental P&T committee. Associate professors can elect to have the P&T committee evaluate their performance, but annual review by the P&T committee is not required. The letter from the P&T committee is provided as input to the review by the department chair (described above). The annual evaluation letters provided by the chair are included in the candidates' package for promotion and tenure, but the P&T letters are advisory to the chair and are not typically included as part of the candidates' record.

Course planning. Each sub-discipline in Civil Engineering (environmental, transportation, structures, water resources, and geotechnical/materials) prepares a five-year teaching plan which is submitted to the chair. Each semester, course scheduling is done with the starting point being the prior year/semester and the five-year teaching plan. Ultimately, course assignments are made by the chair.

Computer Science and Engineering

The Department of Computer Science & Engineering performs annual reviews of all faculty through a Personnel Committee made up of three elected faculty that serves in an advisory role to the Department Chair as established in department bylaws and supplemented with a Personnel Handbook. Annual evaluations are based on the previous three years of activity and use both self-reported data (using an online system) and staff generated reports. Evaluations utilize rubrics for all major categories (research, teaching, service) which are (re)calibrated on an annual basis. Evaluations are used to start conversations with faculty on apportionment changes. In addition, tenure track faculty go through three pre-tenure reviews.

The faculty appreciate and respect the evaluation process. It is widely seen as fair and works very well for the department. The process is collegial and consensus is generally reached easily. The committee and chair believe it is very

important that evaluations align with each other. The committee, chair and department place a great emphasis on quality rather than quantity especially in regards to research activity. The evaluation process also services as an opportunity to educate and advise faculty on development and career success.

Durham School of Architectural Engineering and Construction

Annual Evaluation. All faculty are required to submit an annual evaluation report by mid-February. The reports contain abridged CVs that highlight work in the last 1-3 years and written statements of plans for the coming year. The reports are reviewed by the School Director and the relevant Program Coordinator, who prepare a 2-3 page written draft evaluations. The draft evaluations include 0-5 ratings for categories of teaching, research, service, and administration, from which a numerical score is computed as rating x percentage in apportionment. The draft evaluations also include written feedback from the director and program coordinator. Prior to releasing the draft evaluations to individual faculty, the associate director reviews the documents for potential errors and for general agreement. The associate director may suggest modifications or additions. The draft evaluations are then released to faculty members and meetings with the director are scheduled. The draft evaluations are reviewed during the meeting with the director. Missing points of fact or misunderstandings may result in modified evaluations. If so, the updated modified version is sent to the faculty member. The faculty member can disagree in writing if he/she chooses. Otherwise, the evaluation is complete. Final copies are recorded permanently, emailed to the individual faculty, and sent to the COE Dean's Office.

Apportionment or review changes typically occur during the annual evaluation process and are typically negotiated between the individual faculty and the School Director in the draft evaluation meeting. Teaching assignments are typically negotiated between the individual faculty, school director, and relevant program coordinator.

Electrical and Computer Engineering

Faculty Governance. The overall operating procedures and faculty governance structure are laid out in the ECE Department bylaws, which were developed and approved by the faculty and all appropriate parties.

Mentoring. All pre-tenured faculty are assigned a mentor by the Department Chair. The mentor is a full professor and must agree to the assignment, which is effectively for the pre-tenure time period. The mentor's function is to serve as the initial point of contact for the pre-tenured faculty member. This function is not specifically included in the mentor's evaluation.

Promotion and Tenure. Pre-tenured faculty are evaluated after their third year by the P&T Committee. They are required to assemble their CV in COE form as well as their teaching portfolio. In addition, they receive a peer evaluation of their classroom performance. This information is reviewed by the P&T committee and review letter is generated that is designed to assess their progress towards tenure and promotion, and make suggestions as to how they can get or stay on track. The letter is approved by the committee and is sent to the faculty member.

The faculty member is encouraged to review the letter with the P&T and department chairs.

Teaching Assignments. The department has a teaching plan that identifies when elective courses are taught, including 800 and 900 level courses. All required courses are taught each semester. The Associate Department Chair is responsible for making teaching assignments. These are done on an ad-hoc basis. Individual faculty generally discuss their assignments with associate chair if they have concerns or requests.

Faculty Workload. Research active faculty, although this term is not clearly defined, teach three courses per academic year. Faculty can buyout with the first course costing 10% AY salary, and the second year costing an additional 20%. Faculty must teach at least one course per academic year unless on leave or sabbatical. The apportionment for this type of faculty member is 50% teaching, 40% research and 10% service. Non-research faculty teach more classes; however, they also typically carry a higher service load such as student advising.

Faculty Evaluation. The faculty are evaluated each year by the chair using form developed within the department. The vast majority of the form is quantitative information on teaching, research and service. There is a section where faculty can assess their own performance and plans for the following year.

Mechanical and Materials Engineering

Annual Evaluation. Faculty are required to submit the annual productivity report to the department chair by early February. The productivity report was formulated in excel/word file to include teaching, research, and service activities of the previous calendar year, and the format has been continually updated to better represent faculty's achievements. Some of the meritorious features of the productivity report include: teaching evaluation score can be compared with those of dept. average for 200, 300, 400/800, and graduate only courses; list of invited talks is included; extramural research expenditures (24-, 25-, and 26-WBS) are included with data provided; number of externally supported GRA (MS + PhD) and post-doc. is included; mentoring of junior faculty is appreciated as one of the service activities. Then, the department chair evaluates the productivity report and grades the performance with 4-level rating (Excellent, Good, Satisfactory, and Needs Improvement - with dual rating available) in teaching, research, and service. The chair provides a one-page Annual Evaluation with these ratings and paragraph(s) highlighting the key features of each area. In April, the chair will meet each faculty with this chair's evaluation sheet to discuss the performance and give advice for future direction. This annual evaluation is completed for every faculty. For tenure track faculty, in addition to this annual evaluation by the chair, third- and fifth-year evaluations by the P&T committee are performed to be included in the P&T package.

Course Planning. The planning for teaching assignments follows a roughly $x+y=6$ system, where x is the number of externally supported graduate students (max. four) and y is the number of courses taught (max. is usually five). Thus, the faculty taught anywhere from 2 to 5 courses per year, depending on research

load. After faculty meeting in December 2017, the teaching assignment is now changed to a more of a holistic determination that accounts for average research expenditures, teaching, and student support over the past six years. Based on this new collective measure, the chair determines the teaching load (# of courses per year) of each faculty for the upcoming two years.

Vision for the College of Engineering

Our taskforce believes that there is a desire among the faculty in the College of Engineering to improve the national visibility and stature of our college by increasing research productivity while maintaining a very high quality undergraduate and graduate education. Our faculty will lead the college to recognition for undergraduate and graduate STEM education as well as research in the college's defined thrust areas.

Achieving this goal will require a strategic plan developed with input from faculty; open and honest communication between faculty and college administration; clear and consistently-defined metrics for teaching, research and service; evaluation against these metrics in a transparent fashion; accountability on the part of both the faculty and administration; and a willingness to compromise on both parts to reach our collective goals. We recommend that any plans for changes in evaluation or workload need to follow from and be consistent with a college-level strategic plan with defined metrics for growth in teaching, research and service.

Summary of Background Data

With our entry to the Big Ten, the College of Engineering joined a peer group containing some of the best public and private colleges of engineering in the country. In addition, the increasing need for economic development within the state of Nebraska and the needs for a highly trained technical workforce require the College of Engineering to continue to grow in teaching and research activities. Currently, the college is enjoying a number of very positive factors including annual growth in undergraduate engineering enrollment and planning for a new building. To continue these positive trends, the college must also spark growth in research and innovation in teaching. After a careful review of data related to current productivity and workload metrics in the COE, our taskforce identified a number of opportunities for improvement.

- *Limited faculty diversity*
The COE has a low percentage of female T/TT faculty, especially among full professors. The percentage of URM faculty is low across all faculty ranks. Efforts to recruit and retain a more diverse faculty should be made by the COE. Our first goal should be to reflect the demographics of Nebraska, with a second goal to reflect U.S. demographics.
- *Lack of correlation between apportionment and productivity*
Currently there seems to be little connection between apportionment and faculty productivity. With the data available, the reasons behind this disconnection are not entirely clear. Efforts should be made to identify factors contributing to this disconnect so that apportionment and faculty productivity in teaching and research become more aligned. Note that while we were not

able to obtain any data on service, anecdotal evidence suggests that many important service activities often fall to the same faculty members repeatedly and that the quality of service work, especially service to the unit or college, is not typically recognized during annual evaluation or during promotion or tenure decisions.

- *Disparate evaluation practices among units*
Our taskforce identified no consistent method for faculty evaluation among units. Some units follow best practices identified in the literature for faculty evaluation. These practices should be disseminated across the college.
- *Low research productivity compared to peer institutions*
COE faculty have low research productivity when compared to Big Ten and regional peers. However, the taskforce believes that our faculty have excellent training and our collective capability to pursue extramural research is on par with these other institutions. Institutional factors should be identified that limit faculty productivity and long-term planning should be done to encourage activities such as large-scale center proposals. Funding sources should be diversified to include more DOD, DOE, NIH, and industry funding. Planning and financial or other resources will be necessary to help faculty write competitive proposals to these agencies and to develop successful large-scale center proposals.

RECOMMENDATIONS

Our committee's recommendations are aligned with the goal to grow the COE's research expenditures while maintaining high quality undergraduate and graduate education. These recommendations follow from best practices identified from within the COE, from other institutions, and from other publications that identify best practices for faculty evaluation

The task force recommends that the College of Engineering disseminate these practices to all departments, encourage departments to adapt and adopt these best practices and provide any necessary resources required to enable departments to improve their processes.

Recommendations with Respect to Planning

- With respect to teaching load, as shown in Figure 11, T/TT faculty in many COE units teach an average of three courses per year with the exception of CIVE and DSAEC, where the average is four courses per year. It is our understanding that the teaching load at many of our peer institutions is approximately two-to-three courses per year for research-active faculty. A load of three courses per year at the typical apportionment of 50% teaching, translates to a baseline of about 0.15 teaching FTE per course. The taskforce believes this should be considered a baseline to which appropriate adjustments should be considered (either up or down based on the pertinent factors). Adjustments to teaching

load may take into consideration factors such as development of a new course, the nature of the course (i.e. enrollment numbers, undergraduate vs. graduate, major vs. service course), the delivery of the course (online, multi-site, flipped, traditional lecture, team taught), the level of TA or grading support, advising, as well as other factors.

- The College of Engineering should explore standardizing how other activities under the teaching apportionment are counted such as undergraduate and graduate student advising, supervision of teaching assistants, and advising student clubs and groups. For example, the College of Agricultural Sciences and Natural Resources (CASNR) has a teaching and advising calculator that incorporates both classroom teaching and other teaching activities.
- It is common practice both in the College of Engineering and by our Big Ten peers to reduce the teaching load of pre-tenure faculty to 1-1 to enable them to build a successful research program. This practice should continue. Historically, this has been accomplished through teaching release. However, in the recent past, this has been addressed through giving pre-tenure faculty a different apportionment (60% research, 30% teaching, 10% service). It is not clear if reducing teaching load through a higher research apportionment is beneficial to untenured faculty, and the mechanism by which apportionment may be adjusted after tenure to include increased teaching load is not entirely clear.
- As described above, the COE should invest resources in planning for large multi-PI, multi-institution center-type proposals, which may take five-plus years to realize. Additionally, resources should be established to assist faculty with diversifying their research portfolios to include more DOE, DOD and NIH funding.
- Changes in FTE apportionment are mutually agreed upon by the individual faculty and the department Chair. Changes should not be made haphazardly; departments should be “slow to change” a faculty member’s apportionment. Changes in apportionment should be made as a response to success in research or teaching demonstrated over multiple years or as a planning tool to provide release time for large-scale research initiatives (center proposals). Teaching is an essential and fundamental part of the mission of the College of Engineering and as such, a reduction in teaching load should not be seen as a “reward” for good research neither should an increase in teaching load be considered a punishment for poor research activity. Apportionment and activities should always reflect the strengths of individual faculty.
- Though this task force’s focus is on faculty, it is also our recommendation that departments be encouraged or required to develop near-term strategic plans (five-year plans) that set departmental goals with a general plan for achieving them and a justification for how the goals would bring value to the department, faculty, and students. These strategic plans would then serve as a basis for college-wide strategic goals and planning.
- A best practice identified by the committee is the use of a framework to help evaluate faculty regarding meeting their research apportionment. Flexible metrics will need to be used to evaluate faculty across the college, given the differences between academic units and research areas in how research productivity is best measured. Thus, a framework is suggested that includes a series of different metrics, for which many but not all may be applied for evaluating an individual faculty member. These target productivity metrics

should increase over time. An example of such a framework is one provided below that has been used within the College of Engineering at Missouri S&T is provided below.

	Model Activity for AY 2012-2013 ¹	Target Activity by the end of AY 2015-2016
<i>Workload Model 1: Research Active Faculty</i>		
▪ Courses taught per year	4	3
▪ Number of Ph.D. students ² graduated every 4 years	1	2
▪ Number of M.S. students graduated every 3 years	3	4
▪ Number of peer-reviewed journal publications / year	2-3	4
▪ Number of conference publications ³ / year	3	2-3
▪ Annual contract expenditures ^{4,5}	\$100 – \$150K/yr	\$150 – \$250K/yr
<i>Workload Model 2: Research Intensive Faculty</i>		
▪ Courses taught per year	3	2
▪ Post-docs every 3 years	–	1 (<i>highly rec.</i>)
▪ Number of Ph.D. students ² graduated every 4 years	1	3
▪ Number of M.S. students graduated every 3 years	4-5	2-3
▪ Number of peer-reviewed journal publications ³ / year	4	6
▪ Number of conference publications / year	4	3
▪ Annual contract expenditures ^{4,5}	\$150 – \$250K/yr	\$300 – \$500K/yr

- To aid strategic planning, the development of a tool or model to help units estimating their near-term teaching FTE “demand” would be valuable. This teaching “demand” would be compared to the available faculty teaching FTE at the unit (and sub-unit levels as is appropriate). Such a comparison will help drive strategic planning focusing on possible methods of bridging differences in anticipated teaching demand and available teaching FTE. The strategic planning process could then consider options such as: (1) modifying the curriculum so it could be met by available teaching FTE, (2) providing incentives for faculty to increase their teaching appointment, and/or (3) engaging with College administration to provide additional teaching resources.

Recommendations related to Reporting

- Every department uses some form of electronic reporting, but for the most part it is ad-hoc (using Excel or word forms). A few departments make use of online systems (BSE uses activity insight. CSE uses a system built in-house) to streamline the reporting process. Online systems have several advantages, but may be inflexible for reporting certain activities. The taskforce recommends that the COE investigate adopting an on-line reporting system. Care should be taken in the design of any system to ensure that it is flexible, customizable and provides for the basic reporting needs of all departments.
- It is vital that reporting be transparent to faculty. Faculty should have a reasonable opportunity to review and revise any artifact used in the evaluation process to ensure accuracy. This includes any statistics or reports produced by the College of Engineering or unit such as teaching reports (student evaluations, peer evaluations, SCH reports) and research expenditure reports.

- Annual evaluations should contain not only a report of activity but give faculty an opportunity to self-evaluate and provide a written (1-2 page) summary of activity, highlighting anything that the evaluator(s) should pay particular attention to. In addition, annual evaluations should provide faculty the opportunity to set short-term (within the next year) and near-term (a 5-year plan) goals to be considered in the evaluation process. The self-evaluation should also include a retrospective of how well goals in previous year(s) were achieved. Department chairs should use these documents to mentor and enable junior faculty in their career development.

Recommendations related to Evaluation

Successful annual evaluation processes are ones that are open and transparent, have clearly articulated expectations while being flexible, and have the buy-in of faculty. The task force has identified several best practices in annual evaluations that support these characteristics.

- For the sake of transparency, evaluation processes should be open and codified in a document (bylaws or a detailed operating procedures' document) available to faculty. For the sake of faculty buy-in, this process and document(s) outlining the process should be ratified through a faculty vote and be subject to clarification and amendment by a similar faculty vote.
- It is common for annual evaluations to be under the sole purview of the department Chair. However, the formation of a Personnel Committee of elected faculty that serves an advisory role to the Department chair has many advantages. A Personnel Committee empowers greater faculty governance and brings a more diverse set of voices to the evaluation process. It increases faculty involvement in the process, enabling a consensus approach to evaluations. One disadvantage of a Personnel Committee is that it represents a substantial investment in faculty time and effort, making it perhaps difficult to implement Personnel Committees in departments where faculty service loads are already relatively high. Implementing additional layers of review is an alternative to Personnel Committees (such as in the DSAEC where the director, program coordinator and associate director all participate in the evaluation process). The separate roles of a personnel committee and P&T committee must also be clearly established.
- Faculty activities may vary greatly from year to year. To account for this, annual evaluations should be based on the previous 2-5 years of activity. This has the effect of averaging out high-activity years while deemphasizing a short low-activity period.
- A successful evaluation process cannot be arbitrary or have the appearance of being arbitrary. An easy and effective way to facilitate objectivity and consistency in an evaluation is to establish and use of a set of rubrics for each category of activity. Rubrics need not be fine grained or prescriptive, but instead establish a discrete set of ratings as well as aspects or measures that define those levels of achievement. It is essential that rubrics be flexible and emphasize quality of activities rather than quantity. For example, a rubric should not define X number of publications, but instead should require that publications be of "high quality" as measured by acceptance rates, journal

ratings, or other metrics relevant to the particular field of research. Rubrics should provide examples of evidence but not be interpreted as exhaustive or a laundry list of expectations. An example of rubrics being used in CSE are provided in Appendix C.

- Any evaluation documentation should also include an explicit description of what is considered acceptable performance. As described in Best Practices for Faculty Evaluation (Jeffrey Buller), faculty evaluation schemes should not be designed to produce a bell-shaped curve with only a few faculty in the highest and lowest evaluation categories. Rather, because faculty are trained, selected and evaluated extensively, rating systems should be designed to consider gradations of good performance. See Appendix D for excerpt from Buller on the “Lake Wobegon Effect”.
- Any successful evaluation process should also be subject to its own evaluation. For that reason, the evaluation authority (chair or committee) should “calibrate” the annual review process on an annual basis and make recommendations for changes to the process and rubrics.
- Departments should be encouraged to incorporate more mechanisms and measures for evaluation of teaching in annual reviews, and the use of additional measures of effective teaching should be considered in P&T evaluations. The specific mechanisms and how they will be used may be varied but could include: annual peer evaluations of teaching through the pre-tenure period with regular peer teaching evaluations conducted for each reappointment or promotion case; teaching statements and teaching portfolios; and course retrospectives/reflections to document improvements or changes in a course.
- Evaluations should also measure a faculty member’s trajectory. Evaluations from prior years may not be outstanding, but if the faculty member is showing improvement year over year, it indicates they are on an upward trajectory (thus the recommendation for an evaluation to cover a 2-3 year window of prior activity). Similarly, a downward trajectory can indicate that revised mentorship or intervention may be necessary, especially for pre-tenure faculty.

Establishment of a Pre-Tenure Third Year Review

Current status. Each department currently has different rules for the third-year review for newly appointed tenure-track (TT) faculty. While a third-year review is not required by current COE policy (and thus the inclusion of the third-year review in the P&T package is not a required action), the task force recommends establishing a pre-tenure third-year review as a standardized college-level procedure.

The benefit of a standardized college-level third year review. The benefit of the third-year review for TT faculty is that it provides these faculty with an opportunity to be officially evaluated in all three required areas (research, teaching, and service) to provide significant feedback on progress towards tenure. With proper feedback, TT faculty can be advised to continue their good practices in research, teaching, and service and/or to appropriately adjust their plans for the rest of the pre-tenure period in preparing for the P&T evaluation. This advantage will benefit not only the TT faculty but also the department and college by making sure that the investment in TT faculty in the form of start-up support is properly used to improve research and

education in the COE. To make the best benefit out of this, the third-year review should be standardized throughout the college and applied to all units.

Considerations for third year review process. A specific procedure for a third-year review will need to be developed by the college units and the college P&T committee. Considerations for the third-year review include issues of timing, what materials will be included, and a detailed procedure for how the review would progress in the units and at the college level. In terms of timing, the task force discussed that conducting this review during the third year of a TT appointment would allow the faculty member time to develop in their teaching, research and service roles, but be early enough in their pre-tenure period that course corrections can be applied. With respect to the format, the task force suggests that the full COE P&T package with the exception of external letters be used in the review process. Other concerns related to the process discussed by the task force include whether or not the departmental P&T committee would hold a vote, or just provide an evaluation letter, whether the process continues on to the department chair and college committee, and how the third-year review letters would be included in the candidate's P&T dossier. Another consideration would be whether the third-year review process should end in a reappointment decision (i.e., continuation along the tenure track), or whether it is only advisory to the faculty member.

Recommendations related to Quality of Activities

- The taskforce strongly recommends that the college P&T committee develop clear evaluation and promotion processes for both research and practice faculty. Currently, there are only guidelines in place for promotion of T/TT faculty which are being adapted for use by faculty and practice faculty. However, these faculty have a different role than T/TT faculty and the evaluation and promotion processes for these faculty should reflect this. The taskforce also feels strongly that practice and research faculty make important contributions to our college, and the college needs to develop a culture that supports and mentors these faculty. Development of guidelines for practice and research faculty should include input from these groups of faculty.
- It is important that the COE develop additional metrics to identify quality in teaching, research and service. For example, in research, the COE currently emphasizes research expenditures and total number of papers. However, other metrics such as publication impact, and development of research capacity at UNL (through research mentoring, building interdisciplinary teams, development of large-scale research centers) should also be recognized. With respect to research expenditures, other considerations should also be considered. For example, collaborative proposals may negatively impact faculty with respect to individual research expenditures, but may represent an innovative collaboration with high impact. Such considerations should be made when evaluating research quality. In teaching, other information beyond student evaluation of teaching scores should be used in evaluation as described previously. It is recommended that the COE investigate measures for quality service activities, which are examples of leadership and self-governance activities within the college. Faculty engaged in leading service activities should be recognized for their leadership and service activities are an important aspect of faculty self-governance. Many service activities benefit

research and teaching missions of the university and should be recognized as contributing to these missions of the college.

- Teaching quality can be recognized and celebrated in the college through development of chaired positions for faculty based on teaching excellence. The taskforce recognizes that this would require additional development activities to generate endowments for these chairs.
- The taskforce recommends that the COE work to build a stronger culture of leadership, especially among the fully-promoted faculty. For example, the University of Michigan ADVANCE program has developed an annual review form that includes the following service categories:

(1) Outreach activities (pre-college student training and recruiting, minority and women faculty and student recruiting); (2) Mentoring of faculty and students (in addition to graduate students you are supervising); (3) Please list the names of any junior faculty for whom you read a draft version of a manuscript and provided feedback on; (4) Please list the names of any junior faculty to whom you were assigned to be a mentor. Other examples of leadership may be conducting a workshop with faculty who then developed a successful independent research proposal.

These types of leadership activities should be fostered, especially for fully promoted faculty, as an expectation of leadership is required for full promotion.

APPENDIX A

CATEGORY	DEFINITION OF CATEGORY
TEACHING	<p><i>All activities related to teaching credit-generating courses, whether residential or distance, with regularly enrolled students and general student advising.</i></p> <p>Preparation for a course</p> <ul style="list-style-type: none"> • Development of material for new courses and curricula • Preparation of lectures and demonstrations <p>Time in the classroom (or equivalent for distance courses)</p> <ul style="list-style-type: none"> • Instructing a recurring credit class or section of a class in a formal setting • Supervision of students in independent study courses <p>Direct contact with students related to the course</p> <ul style="list-style-type: none"> • Supervision of graduate students on thesis and dissertation research • Interacting with students during office hours (or via distance) <p>Administrative duties related to the course</p> <ul style="list-style-type: none"> • Supervision of teaching assistants • Class rosters • Thesis/Dissertation committees <p>Time spent in evaluations related to the course</p> <ul style="list-style-type: none"> • Preparation of evaluation tools (exams, quizzes, assignments, etc.) • Grading of exams/quizzes • Evaluation of student-prepared documents and/or creative works <p>Activities related to improving general undergraduate instruction (excludes committee work)</p> <ul style="list-style-type: none"> • Advising student clubs and groups • Development of new learning experiences for students involving laboratories or computers (e.g.) <p>General advising of students on:</p> <ul style="list-style-type: none"> • Enrollment issues • General career choices • General academic issues • Advise to undergraduates about graduate school options • Graduation checks • Personal counseling related to academic issues, etc.
RESEARCH/ CREATIVE ACTIVITY	<p><i>Activities associated with investigation or experimentation aimed at the discovery and/or interpretation of facts or ideas as well as the development of creative works or new products.</i></p> <ul style="list-style-type: none"> • Creation of new knowledge through <ul style="list-style-type: none"> ○ Experimentation ○ Data analysis ○ Library research • Creation of dramatic, literary or artistic works • Creation of professional books, book chapters, or monographs • Creation of new products (e.g., computer programs, cultivars) • Research or creative work directed at the generation of new knowledge or materials (e.g., paintings, poems, designs, etc.) for publication in professional journals, technical reports, other similar professional outlets (e.g., electronic media) or presentations at professional meetings. • Preparation of grant proposals for funding • Management of grant activities • Supervision of post-doctoral research associates

<p style="text-align: center;">EXTENSION/OUTREACH (PUBLIC SERVICE)</p>	<p><i>A form of scholarship that cuts across teaching, research, and service. It involves generating, transmitting, applying, and preserving knowledge for the direct benefit of external audiences in ways that are consistent with the university and unit missions.</i></p> <p>Outreach activities contribute to public welfare or the common good, call upon faculty members' academic and/or professional expertise and directly address or respond to real-world problems, issues, interests or concerns. In short, the organized application of a faculty member's professional expertise to problems and tasks both on-campus and outside the campus.</p> <p>Outreach includes dissemination of information to and other programming for the general public through written, oral, electronic, or other media. Activities make available institutional resources and expertise outside the context of the instructional program (extending the instructional program to a broader student clientele is included under teaching).</p>
<p style="text-align: center;">SERVICE (CITIZENSHIP)</p>	<p><i>Citizenship activities that contribute to the operation of the institution or of a disciplinary or professional organization.</i></p> <ul style="list-style-type: none"> • Initiating, working on, and/or providing support for the goals, missions, or aspirations of: <ul style="list-style-type: none"> ○ University of Nebraska ○ UNL ○ Academic Affairs / IANR ○ College / Division ○ Department / Center • Activities related to serving or chairing committees on issues or directives of these units. • Activities associated with such departmental functions as interviewing prospective faculty members, assisting in the development of department policies, tenure review, and so forth. • Activities associated with shared governance, academic affairs, and other forms of institutional operation. • Time spent in leadership roles in professional organizations outside of the University. • Activities associated with Professional Groups, Leadership Positions, Journal Reviewer, etc. <p>(Does NOT include civic contributions such as election to office, jury duty, or volunteerism with religious, philanthropic and other nonprofit organizations.)</p>
<p style="text-align: center;">ADMINISTRATION</p>	<p><i>Activities associated with the day-to-day management of the institution, its units and programs.</i></p> <ul style="list-style-type: none"> • This category would include all college and departmental/unit activities that are associated with the administration functions of the instructional, research and service activities. • It includes the activities of the college deans, the administrative activities of department heads or chairpersons and the activities of their associated support staff. • It includes the executive level activities concerned with the overall management of and long-range planning for the institution. • It consists of the activities related to the day-to-day financial management and fiscal operations. • Activities that relate to the administration of personnel such as recruitment and hiring of faculty and staff and the administration of employee programs. • Computer and data processing services that are needed to support the institution-wide administrative functions. • Activities needed to maintain relations with the local community, alumni, governmental entities and the public in general. • Activities related to maintaining existing grounds and facilities, providing utility services, facilities and space management and health and safety services.

APPENDIX B

Annual Review Processes

Annual Review Processes												
	Documentation				Evaluation Process					Summary		
Unit	Includes Standardized CV or Form?	General Description of CV or Form	Specific Data Requested Other than typical teaching, research, & service metrics	Utilize Productivity Management Tool?	Primary Evaluators	Personnel Committee Description	Timing	Feedback Process		Annual Review Strengths	Annual Review Opportunities	Additional Annual Review Notes
								Format of Feedback	Rating Scheme / Calculations			
BSEN	Yes, on-line annual report	Form with specifics related to classes taught, research (grants, publications), graduate and undergraduate advising, specific service activities, future goals in each area of apportionment, and a summary of the faculty members impact.	future goals and summary of impact	on-line tool used throughout IANR	Dept. Head, non-fully promoted faculty are reviewed annually by P&T Committee. P&T Committee provided several paragraphs to chair that are used as part of evaluation process.		Submitted during January	two page document, with discussion related to: accomplishments, impacts, and organizational, team, and communications completencies. A five point scale is used.		Consistent data among faculty. Includes discussion of future goals, and review of past goals.		
CIVE	Departmental Form and College P&T CV	Form includes activities in teaching, research and service with some indicators of impact (i.e. journal impact factors). Includes student evaluation of teaching scores. Also has 1 year and	goals for next year and 5 year goals	No	Department Chair. Untenured faculty provide their P&T folder to P&T committee each year, but this letter is supplementary to the chair's letter and only the chair's letter is included in the P&T package	No personnel committee	Information typically submitted by mid January, reviews completed by Chair by end of March	Overall performance evaluation on 6 point scale: excellent, very good, good, satisfactory, marginal, unsatisfactory. Written feedback is provided from the chair on areas where commendation is due; areas where modificaitons in activities or	Information on how 6 point ratings are determined are not provided to faculty	consistent documentation between faculty		

		5 year goal statements						objectives are required and other comments. The written report is signed by the chair and faculty member to acknowledge receipt. It is discussed in a meeting with the chair and the faculty member.				
CSE	Yes, Online system	CV of activity for the last 3 years	Professional goals for the next year, 1-2 page statement highlighting activity	online system built in house	Personnel Committee	3-4 T/TT elected faculty (3 year terms, one per major research area)	materials submitted by mid Jan, committee evaluates over Jan-Feb	5-level rating on each: Research, Teaching, Service, and Overall with short written statement provided to the chair (not faculty); Chair makes final evaluation in the form of a letter with (possibly augmented) ratings	Consensus score of the committee members based on a "calibrated" rubric	Transparent, consistent and has the approval and acceptance of the faculty, codified in our bylaws	Other considerations are being made to reduce workload of Personnel Committee including sampling or less frequent evaluations for post-T faculty; accurate reporting of financial records is extremely difficult and time consuming a unified system should be considered	Format of review requires a substantial time commitment not only for review but review of the process
DSAEC	Yes	Abridged CV highlighting work in last 1-2 years & plans for coming year	For each course, whether 1st, 2nd or 3rd+ time teaching	No	Director + Program Coordinators	N/A	Submit materials Mid-February	2-3 page written evaluation & meeting with director	0-5 rating for categories of teaching, research, service, & administration; final score = category ratings x % in apportionment	Transparent system; consistent documentation & processes across faculty	More closely follow CoE CV & highlight last 1-3 years so that faculty only have to keep one CV format up-to-date for reviews + P&T	

ECE	Yes	Form includes specifics on classes taught, all publications, all graduate students supervised and committees served on	teaching evaluation data, list of invited talks; No. of externally supported GRA (MS + PhD), grad student committees served, active grants, dollar amounts, publication status and details	no	Dept. chair	N/A	Submitted End of January	Written summary of evaluation with respect to Teaching, Research Service, individual evaluation of each component and total evaluation, individual meeting with Chair to discuss evaluation.	4-level rating (Excellent, Good, Satisfactory; Needs - with Improvement)	Codified in bylaws, with input from ECE Executive Comm. Faculty support process, can be changed via faculty input of Executive Comm.	Apportionment is discussed individually with faculty member, allowing for consensus changes on a yearly basis as needed.	
MME	Yes	MME Faculty Productivity Report as an Excel sheet: calendar year report on teaching, research, and service	Teaching evaluation data as compared with dept. average (provided for questions 22-29); list of invited talks; Research expenditures (24-, 25-, and 26-WBS) (data provided); No. of externally supported GRA (MS + PhD)	No	Dept. Chair	Plans to form the Personnel Committee	Submit the Productivity Report of the previous calendar year in Feb.	1-page Chair Evaluation in March; chair meets with the faculty to confirm and sign; For promotion and tenure, this annual review sheet is added in the package	4-level rating (Excellent, Good, Satisfactory; Needs Improvement - with dual rating available) in teaching, research, and service; paragraphs highlighting the key features of each area are added	The Excel Productivity Report revised annually for continual improvement in evaluation; the categories hit all required specific fields; allows comparison with dept. average; one-to-one meeting with chair provides a chance to reconfirm the evaluation and hear the expectation in the coming year	An evaluation of publication quality may be included (while the 5 notable paper list somewhat represents it)	Transition to a Personnel Committee will need initial regulation set-up

Planning Processes

Planning Processes													
	General				Teaching Apportionment						Summary		
Unit	Typical Apportionment % (Research / Teaching / Service)				Typical Teaching Load (X + X)			Each course worth approximately	Course Weighting Scheme Utilized? (number enrolled, TA, etc.)	Course Buyout Details	Apportionment Strengths	Apportionment Opportunities	Additional Apportionment Notes
	Tenure Track	Tenured	PoP	Research Faculty	Tenure Track	Tenured	PoP						
BSEN	highly varying, from 60/38/2 to 38/0/2/60 (extension)	highly varying, from 60/38/2 to 38/0/2/60 (extension)	0/98/2	98/0/2	1+0 or 1+1	highly varying	3+3	Use CASNR formula	Use CASNR formula	no buyout allowed	Apportionment as well as expected activities associated with apportionment are defined in each faculty member's position description.	Apportionment has been slow to be changed, even when actual activities are different from official apportionment.	P&T Committee sometimes suggests revising apportionment and position description based on recent activities and assignments.
CIVE	mostly 60/30/10, some are 50/40/10	most are 50/40/10	0/90/10	90/0/10	1 + 1	2 + 2 or 2 + 1	3 + 3	10-15%	no	buyout allowed at ~9% AY salary			
CSE	45/45/10	45/45/10	0 / 90 / 10	90 / 0 / 10	1 + 1 (1st 3 years, 1 + 2 after)	1 + 2	3 + 3	15%	Not formally; additional considerations (first prep, enrollment, etc.) are made by Personnel Comm. in evaluation process	UNL guidelines, minimum 1 course per year, buyout of grad-level courses first	Apportionment is "slow to change/react" only after 2-3 years of performance would apportionment change either way		Personnel Committee makes recommendations for apportionment change, ultimately negotiated on an annual basis between Dept Chair and faculty; never more than 60/30 in either direction for T/TT faculty

DSAEC	60 / 30 / 10	45 / 45 / 10 or 30 / 60 / 10			1 + 1	2 + 1 or 2 + 2		15%	no	1 course 10%AY, second course additional 20% AY, must teach at least 1 course/year	Apportionment can change yearly if circumstances support changes.		Apportionment is established between chair and faculty member
ECE	60/30/10	40/50/10	0/90/10	90/0/10	1+1	2+1	3+3 or 3+2	15%					
MME	60/30/10	60/30/10 to 30/60/10			1+1	Depending roughly on externally supported GRAs, teaches 2 to 5 courses per year		15%	No written rule but considered when the chair evaluates	One course buy out with 1/8 annual salary or \$10,000 (the smaller one); must teach at least 1 course/year	Apportionment (and resultant teaching load) is to be adjusted based on faculty activeness in research and funding		Transition to a Personnel Committee will need initial regulation set-up

APPENDIX C

Research

	Good	Superior	Outstanding
A	<ul style="list-style-type: none"> • One paper in a top venue or multiple papers in second tier venues • 1 RA support a year • Grant expenditures: 50K/year 	<ul style="list-style-type: none"> • 2 top tier papers and some second tier papers • 1.5 RA support per year • Grant expenditures: 100K/year 	<ul style="list-style-type: none"> • 3 top tier papers and some second tier papers • 2.5 RA support per year • Grant expenditures: 150K/year
B	<ul style="list-style-type: none"> • One paper in a top venue or two papers in second-tier venues a year • 1 RA support a year • Grant expenditures: 50K/year 	<ul style="list-style-type: none"> • One paper in a top venue + another paper in a top venue or two papers in second-tier venues a year. • 1.5 RA support a year • Grant expenditures: 100K/year 	<ul style="list-style-type: none"> • Two papers in top venues + another paper in a top venue or two papers in second-tier venues a year. • 2.5 RA support a year • Grant expenditures: 200K/year
C	<ul style="list-style-type: none"> • One first tier publication (either top journal or top conference) • One RA funded per year • Expenditures of 50K per year 	<ul style="list-style-type: none"> • Three first tier publications per year (either top journal or conference) • Two RA funded per year • Expenditures of 100K per year 	<ul style="list-style-type: none"> • More than three first tier publications per year (either top journal or conference) • Three RA funded per year • Expenditures of 150K per year • Research award, best paper, organization recognition

Teaching

	Good	Superior	Outstanding
A	<ul style="list-style-type: none"> • No negative trends • Average evaluations (based on course level) • 1 MS student per year or 1 PhD every 3 years. 	<ul style="list-style-type: none"> • Above the average teaching evaluations. • 1.5 MS student per year or 1 PhD every other year 	<ul style="list-style-type: none"> • High teaching evaluations. • 2MS or 1 PhD per year • Innovation in educational pedagogy
B	<ul style="list-style-type: none"> • Average teaching scores • No obvious repeating/negative trends • 1 MS student a year or one PhD student over the three years. 	<ul style="list-style-type: none"> • Above average teaching scores • 1 MS student a year or one PhD student over the three years. 	<ul style="list-style-type: none"> • Top teaching scores • 1 MS student a year and one PhD student over the three years.
C	<ul style="list-style-type: none"> • 1 MS per year, or 1 PhD + 1 MS every 3 years • Average teaching evaluations for course level 	<ul style="list-style-type: none"> • 1.5 MS per year, or 1.5 PhDs every 3 years, or 1 PhD + 2 MS every 3 years, ... • Teaching evaluations above average for course level 	<ul style="list-style-type: none"> • Two MS per year, or two PhDs every 3 years, or one PhD + two MS every 3 years • Teaching evaluations among upper quartile for course level • Teaching award or especially impactful teaching innovation

Service

	Good	Superior	Outstanding
A	<ul style="list-style-type: none"> Assistant: served on departmental committees Associate: Department leadership and PC participation (editorial board of journals) Full: Lead important committees in the department and some participation in campus leadership and leadership in professional community 	<ul style="list-style-type: none"> Assistant: Departmental committees participation. Some external service in professional community. Associate: Department leadership and PC participation (editorial board of journals) Full: Lead important committees in the department and demonstrate leadership in professional community 	<ul style="list-style-type: none"> Assistant: Departmental committees participation. Some external service in professional community. Associate: Department leadership and PC participation (editorial board of journals) Full: Lead important committees in the department and campus and leadership in professional community
B	<ul style="list-style-type: none"> Assistant: Serve on departmental committees. Some external service in high quality venues Tenured: Serve on departmental committees with some senior roles. Some external service in high quality venues, or editorial work or served on university level committees. 	<ul style="list-style-type: none"> Assistant: Serve on departmental committees. External service in couple of high quality venues Tenured: Serve on departmental committees with senior roles, chair at least one committee. External service in couple of high quality venues, and/or editorial work or served on university level committees. 	<ul style="list-style-type: none"> Assistant: Serve on departmental committees. External service in couple of high quality venues with some leading roles. Tenured: Serve on departmental committees with senior roles, chair at least one committee and make significant impact. External service high quality venues with leading roles, editorial work or served on university level committees.
• C	<ul style="list-style-type: none"> Assistant: Participation in Department Associate: Some leadership in Department and some participation outside Full: Some leadership in Department and some participation outside. 	<ul style="list-style-type: none"> Assistant: Participation in Department and some outside Associate: Some leadership in Department and some leadership outside (in PC or Boards or first tier pubs) Full: Leadership in Department/University and some leadership outside (in PC or Boards or first tier pubs) 	<ul style="list-style-type: none"> Assistant: Participation in Department and some outside Associate: Some leadership in Department and some leadership outside Full: Some leadership in Department/University and strong leadership outside (as GC or PC of conferences, EiC of journals, etc)

Other Items

	Research	Teaching	Service
A	<ul style="list-style-type: none"> • Awards and Recognition • Impact (to other fields) • Trends, Change of Research Area • Patents 	<ul style="list-style-type: none"> • New course development • Teaching awards • Students mentoring 	<ul style="list-style-type: none"> • Local/Nebraska outreach • Startup or similar activities
B	<ul style="list-style-type: none"> • Invited talks • Research awards 	<ul style="list-style-type: none"> • Contributed to new course development • Teaching awards • Student mentoring: student awards • UCARE/REU projects 	<ul style="list-style-type: none"> • Served on external funding agency's panels (such as NSF panels)
C	<ul style="list-style-type: none"> • For Assistant Profs: independence from advisor/s • UNL student participation in pubs • Patents • Start-ups • Undergraduate research 	<ul style="list-style-type: none"> • Student comments in evaluations • Mentoring activities outside the norm 	<ul style="list-style-type: none"> • Outreach to community • Load and impact associated with committees served

Teaching Evaluation Rubric Ideas

May 3, 2016

<i>Teaching Performance: Reflects the performance of the faculty member in course delivery.</i>				
Outstanding	Superior	Good	Adequate	Poor
Evidence indicates high levels of effectiveness in <i>all</i> of the following: a) student learning, b) teaching and assessment methods, c) use of technology, d) communication, e) enthusiasm for teaching, f) subject matter knowledge, g) course and subject matter organization and preparation, h) timeliness of grading.	Evidence indicates high levels of effectiveness in <i>most</i> of the following: a) student learning, b) teaching and assessment methods, c) use of technology, d) communication, e) enthusiasm for teaching, f) subject matter knowledge, g) course and subject matter organization and preparation, h) timeliness of grading.	Evidence indicates high levels of effectiveness in <i>most</i> of the following: a) student learning, b) teaching and assessment methods, c) use of technology, d) communication, e) enthusiasm for teaching, f) subject matter knowledge, g) course and subject matter organization and preparation, h) timeliness of grading.	Evidence indicates a lack of effectiveness in <i>some</i> of the following: a) student learning, b) teaching and assessment methods, c) use of technology, d) communication, e) enthusiasm for teaching, f) subject matter knowledge, g) course and subject matter organization and preparation, h) timeliness of grading.	Evidence indicates a lack of effectiveness in <i>many or most</i> of the following: a) student learning, b) teaching and assessment methods, c) use of technology, d) communication, e) enthusiasm for teaching, f) subject matter knowledge, g) course and subject matter organization and preparation, h) timeliness of grading.

Evidence

Evidence is required to justify the rating for each rubric. The following (incomplete) list includes potential sources of evidence. Each piece of evidence is associated with a scale by which it is measured (see examples listed below). Each piece of evidence may carry a different weight.

1. Department, university, or national/international teaching award
2. Course evaluation score, e.g., *above* department mean for same level course, *at or above* department mean for same level course.
3. Course evaluation comments
4. CSCE Department's anonymous feedback form
5. Solicitations of feedback from the Department chair or other faculty
6. Receipt of funding for teaching related activity
7. Teaching performance, e.g., judged as *excellent* by departmental or external peers, judged as *acceptable* by departmental or external peers
8. Student exit interviews

Teaching Evaluation Rubric Ideas

May 3, 2016

<i>Teaching Improvement: Reflects the performance of the faculty member in continuous improvement of teaching and teaching-related activities.</i>				
Outstanding	Superior	Good	Adequate	Poor
Evidence indicates a significant level of effort to improve teaching and teaching-related activities <i>and</i> results show <i>significant</i> success resulting from efforts.	Evidence indicates a significant level of effort to improve teaching and teaching-related activities <i>and</i> results show <i>some</i> level of success resulting from efforts.	Evidence indicates a moderate level of planning or efforts to improve teaching effectiveness or course <i>and</i> results indicate <i>some</i> level of success resulting from efforts.	Evidence indicates some level of planning or efforts to improve teaching effectiveness or course with some level of success. <u>And</u> , evidence indicates participation in professional development during the performance period	Minimal or no evidence to indicate planning or efforts to improve teaching effectiveness or course. <u>And</u> , minimal or no evidence of participation in professional development during the performance period

Evidence

Evidence is required to justify the rating for each rubric. The following (incomplete) list includes potential sources of evidence. Each piece of evidence is associated with a scale by which it is measured (see examples listed below). Each piece of evidence may carry a different weight.

1. Participation in professional development during the performance period.
2. At least one peer evaluation annually
3. At least one peer evaluation from an external source
4. Improvement in evaluation score for same or similar course
5. Attendance at teaching workshop, conference, etc. aimed at improving student performance or gaining appropriate knowledge
6. Facilitator/presenter in teaching workshop, conference, etc. aimed at improving student performance or gaining appropriate knowledge
7. Current teaching statement and portfolio

Teaching Evaluation Rubric Ideas

May 3, 2016

<i>Curricular & Materials Development: Reflects the performance of the faculty member in designing, developing, maintaining and improving curricula and instructional materials.</i>				
Outstanding	Superior	Good	Adequate	Poor
Evidence indicates <i>significant</i> efforts to design, develop, maintain or improve instructional materials.	Evidence indicates <i>moderate</i> efforts to design, develop, maintain or improve instructional materials.	Evidence indicates <i>some</i> efforts to design, develop, maintain or improve instructional materials.	Evidence indicates <i>minimal</i> efforts to design, develop, maintain or improve instructional materials.	Evidence indicates <i>no efforts</i> to design, develop, maintain or improve instructional materials.

Evidence

Evidence is required to justify the rating for each rubric. The following (incomplete) list includes potential sources of evidence. Each piece of evidence is associated with a scale by which it is measured (see examples listed below). Each piece of evidence may carry a different weight.

1. Demonstrated use of RBIS in at least one course delivered
2. Evidence of use of assessment strategies beyond written exams and quizzes
3. Development of new course
4. Publication of experience report or experimental results in peer reviewed venue
5. Publication of experience report or experimental results in non-peer reviewed venue
6. Publication of textbook or other education aids
7. Participation in program design or review
8. Receipt of funding for teaching improvement activity

Teaching Evaluation Rubric Ideas

May 3, 2016

<i>Advising & Outreach: Reflects the performance of the faculty member in advising and mentoring undergraduate and graduate students.</i>				
Outstanding	Superior	Good	Adequate	Poor
Successful advising performance as evidenced by demonstrated knowledge of the department and programs, resourcefulness in seeking answers, availability, accuracy, respectfulness.	Successful advising performance as evidenced by demonstrated knowledge of the department and programs, resourcefulness in seeking answers, availability, accuracy, respectfulness.	Successful advising performance as evidenced by demonstrated knowledge of the department and programs, resourcefulness in seeking answers, availability, accuracy, respectfulness.	Demonstrated behaviors in <i>some</i> of the following: lack of advising knowledge, failure to utilize resources (e.g., fails to direct student to helpful information), lack of availability, pattern of advising mistakes, disrespectful to advisees.	Demonstrated behaviors in <i>many or most</i> of the following: lack of advising knowledge, failure to utilize resources (e.g., fails to direct student to helpful information), lack of availability, pattern of advising mistakes, disrespectful to advisees.

Evidence

Evidence is required to justify the rating for each rubric. The following (incomplete) list includes potential sources of evidence. Each piece of evidence is associated with a scale by which it is measured (see examples listed below). Each piece of evidence may carry a different weight.

1. Service in a leadership role for student advising
2. Maintenance responsibilities of advising materials
3. Serve as an advisor to an active club or student organization
4. Recruitment into new courses, low enrollment courses, or new programs
5. Supervision of students, e.g., UCARE, undergrad honors theses, independent study courses, M.S. thesis
6. Department, university, or national/international advising
7. Serve as M.S. or PhD committee member

APPENDIX D

The Lake Wobegon Effect

On the radio program *Prairie Home Companion*, Garrison Keillor ends his stories about the fictional town of Lake Wobegon, Minnesota, by calling the community a place where "all the women are strong, all the men are good looking, and all the children are above average." In evaluations where, due to grade inflation or other factors that skew the score, more than half the people under review are rated as above average, this shift of results toward the high end of the scale is known as "the Lake Wobegon effect." (See, for example, Haley, Johnson, and McGee, 2010; Kruger, 1999; Cannell, 1989; and Carney, 1991.)

Many administrators, trustees, legislators, and community citizens believe they're witnessing this effect in faculty merit evaluations. "How can so many of them be rated as 'excellent'?" they ask. "The terms *superior* and *excellent* are used so loosely in matters of faculty merit that they really don't mean anything." As a result, institutions are frequently encouraged and occasionally compelled to recalibrate their faculty evaluation scales in order to make the results adhere to the standard bell-shaped curve. But that type of distribution simply doesn't work for faculty merit evaluations, and reviewers need to be aware of those reasons in order to conduct fair reviews.

A bell-shaped distribution makes perfect sense when you are evaluating a random assortment of individuals. Throw the names of everyone from a particular state or region into a hat, draw five hundred of those names, teach them some new concept or skill that none of them already knows, grade them on their performance, and the result is likely to fall into a bell-shaped pattern. But the faculty of a college or university is not a random selection of individuals. To begin with, all faculty members have to undergo a rigorous period of training and evaluation before they're even offered a position. Then they're reviewed annually and undergo particularly thorough evaluations when being considered for tenure or promotion. Even afterward, with the spread of posttenure review throughout much of higher education, their performance is likely to be placed under strict scrutiny on a regular basis thereafter. Because of these multiple evaluation processes, those who are below

average—and, at many colleges and universities, even those who are merely average—aren't retained; they're eliminated from the system at the earliest opportunity. So although it may be possible to talk about an institutional average for performance, that average shouldn't be misconstrued as performing only at a middling level of quality.

What this lopsided variation in distribution means for a person performing a merit review in higher education is that unless the rating scale is specifically adjusted for use in an academic setting, the results are likely to skew toward the higher end. That's not a flaw in the system; it's a reflection of how faculty members are trained, selected, retained, and rewarded. For this reason, it's usually not helpful to begin a round of merit evaluations by thinking that you need to confine your ratings of faculty members to balance at the middle of the scale. For example, if your rating system is the type of A to F grading scale that we discussed in Chapter Two, and you try to make those grades average out to be a C, you'll probably be rating people too low. If the hiring and evaluation processes are functioning properly at your institution, you may well not have anyone who is performing at the level of a D or F. You may not even have anyone who's performing only at the level of a C. Like the children of Lake Wobegon, everyone is likely to be above average. What this skewing means is that for merit evaluations, you're more likely to be considering gradations of good performance rather than a range that spans every category from Excellent to Completely Unsatisfactory.

Consider the following differences. Think of the faculty members in your program and, without even looking at their résumés or annual reports, try to classify all of them by placing each person in one of these five categories:

1. Very good
2. Good
3. Satisfactory
4. Less than satisfactory
5. Completely unacceptable

In most cases, you'll end up with one of two results: either everyone will collect at the top of the scale, with very few people in the bottom two categories, or you'll find yourself ranking people as "less than satisfactory" and "completely unacceptable" even though their performance really has not been that poor.

Next, try this experiment again, but this time use the following five categories:

1. Stellar
2. Very good
3. Good
4. Meets expectations
5. Below expectations

Think of the term *stellar* as referring to the faculty member who has had a truly phenomenal year: a major new book of research has come out, a large grant proposal was funded, a major national or international award was received, or something similar occurred. Think of the rating *very good* as referring to the faculty member whose year doesn't fall into the category of being stellar but who has surpassed the normally high standards that he or she typically meets. Think of the term *good* as referring to a person who is likely to have received strong course evaluations from students and peers, performed significant research, and gone above and beyond the expected level of service on committees, to the discipline, and in professional associations. Think of the ranking *meets expectations* as referring to someone who probably has fulfilled all the basic requirements of the institution and discipline (and those requirements are already quite demanding) but who is likely not to have done much than go beyond his or her customarily solid performance. Think of the rating *below expectations* as referring to the faculty member who truly has failed to work at the level that the discipline requires, is likely to have relatively low scores in student and peer evaluations of teaching, or whose research does not seem to have been very productive.

When most people approach merit reviews in this way, they find that their evaluations become far more nuanced and objective. They're rating people's work by distinguishing various levels of effective performance rather than trying to force people into categories like *Average*, *Below Average*, and *Failing*.