Description of a University Faculty Evaluation System

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Abstract

The salary of college faculty often is based on a merit and market factors rather than a fixed time-ingrade system. Merit evaluation should be based on the job description, faculty rank, and percent time devoted to teaching, research and service. This paper describes a merit system used in an Agronomy and Horticulture Department. The teaching matrix evaluates efforts in undergraduate and graduate instruction, student credit hour production, student advisees, and student and department head evaluations. The research matrix system is divided into two metrics, publication numbers, and grant dollars. The service matrix is divided into recruiting, community, department, university and professional service and is based on hours spent in each category, compared to a targeted total number of hours. The ratio of undergraduate students/FTE has increased slightly over the last five years along with an increase in graduate students per FTE indicating that merit for teaching is encouraging student enrollment. Research publications /FTE have increased, again indicating the merit system is improving research productivity. Currently service evaluation may be the least effective evaluation tool, as merit for service has not been tied to productivity. Nevertheless, the system has the flexibility to change the weighting factors to better reflect the changing needs of the department.

Introduction

The salary of most college and university faculty in the United States is based on a merit evaluation system and on market factors rather than a fixed time-in-grade system where time in service determines the grade and salary (Weistroffer et al., 2001). An equitable evaluation system that rewards faculty for helping achieve the goals of a department, college, and the university is essential for that unit to function efficiently and effectively. However, faculty like other professionals, are caught between what is beneficial for the individual vs. the common good (Etzioni, 1993). Self-serving needs of individual faculty may not be always in the best interests of the department. Thus, a well-designed merit system can balance these conflicting goals, achieving success for the individual as well as the group.

Merit evaluation should be based on the job description and rank of the faculty and the percent time devoted to teaching, research and service. Assistant professors should be accountable for teaching and research duties, almost exclusively. Leadership activities are the responsibility of associate and full professors. The merit system should be flexible to distinguish the different responsibilities among professorial ranks. The percent time in professional service often is not a formal appointment, but is an extension of scholarship, especially in the land grant universities created by the Morrill Acts of 1862 and 1890 and the Hatch Act of 1887 (Rice and Richlin 1993).

At land grant universities, the legislature funds teaching first and foremost followed by research. Consequently, a university survives and grows based on the number of students enrolled. To have a successful teaching program, universities must hire dedicated teachers. However, in the college, faculty average a 25% teaching appointment. The rest of the appointment is funded by the Agricultural Experiment Station to conduct research. The college as a whole receives 88% of its funds from the Agricultural Experiment Station, Cooperative Extension Service and grants and contracts, with only 12% funded through the teaching budget (College of Agriculture, 2005).

While the teaching component is the smaller component of an academic department, it nevertheless dictates the focus, size and strength of a department. Departments are evaluated by the number of undergraduate and graduate students, student credit hour production, recruiting efforts and service to teaching such as student club advisement. (Univ. of N.M. 2005) These are, for the most part, easily quantifiable. On the other hand, teaching quality is less easily quantified but no less important as good teaching leads to increased student credit hour production and majors. Thus, merit system should consider both the quantitative and qualitative components of teaching.

The research component of a land grant university survives on extramural grants which faculty are expected to generate. These grants fund graduate students and research operational costs. Merit evaluation for funded research should be based on centrality to the college mission, dollar value of the

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grant, and output. Funded research must lead to publications, ranging from refereed journal articles to the popular press. However, different rewards could be given for various forms of publications and could be weighted according to the professor's rank or goals. For example, it may not be prudent to suggest that young faculty devote much effort to popular or extension publications when journal articles are the primary 'currency' of the tenure process. However, senior faculty could afford the time to "extend" the knowledge through other outlets.

Department goals are specific in content, but general in concept to the type of department. The general goal of the agronomy and horticulture department is to improve the quality of life for the citizens of New Mexico through the threefold duties: teaching, research and service in the study and application of plant, soil and water science. The teaching goals are to develop within students the ability to communicate, think and reason intelligently, to simulate intellectual curiosity, to equip the students with the basic concepts and technology of the chosen field and to provide an understanding and perspective of allied fields of study. The goal of research is to generate information and acquire funds to conduct the research in the area of plant, soil and water science. The goal of the service component is to support the university and community through extracurricular activities related to your profession. The goals of the merit system are to help achieve the goals of the department and the goals of individual faculty members.

The objective of this paper is to describe a merit system used in an Agronomy and Horticulture Department within a college of agriculture and to evaluate the system's ability to achieve the goals of a merit system.

Individual faculty goals are many but the main goals are to receive tenure, be promoted to full professor, and receive yearly wages increases.

Methods

Teaching Evaluation Methods

The merit system in the Agronomy and Horticulture Department has evolved over time and currently consists of an accounting system that gives weight for different activities depending on a professor's rank, as explained below. The allocation of time for various efforts is based on Full Time Teaching Equivalent (FTE). One FTE is defined as 12 contact teaching units per semester as defined in the Administrative Policy and Procedures Manual (New Mexico State University Policy Manual, 2003). This also defines an appointment of 100% teaching or research time. An appointment is typically split between teaching and

research, with the service component considered as part of the budgeted research (Eq.1):

FTE =
$$T + O + R_{\Sigma}$$
 Eq. 1
= $T + O + 0.8R_{\omega} + 0.2R_{\omega}$,

where T = the proportion teaching appointment, O = special duties (administrative or other), $R_{\scriptscriptstyle \Sigma}$ = research appointment, and $R_{\scriptscriptstyle S}$ = service, which is initially calculated as 20% of the research appointment and $R_{\scriptscriptstyle \Gamma}$ = remainder, actual research time. However, $R_{\scriptscriptstyle S}$ is not fixed, and can be changed through negotiations with the department head at the beginning of the academic year. In theory, goals set at the beginning of the year would be the basis for deviating from the calculated FTE in every category.

The teaching matrix (Table 1) starts with information on the FTE for undergraduate (UFTE) and graduate (GFTE) classes taught. This is defined in the university policy manual (New Mexico State University Policy Manual, 2003) and is based on 750 minutes per credit hour per semester. The first teaching metric (RankT) is calculated in an Excel spreadsheet by Eq 2:

RankT=IF(UFTE+GFTE<0.06,1,IF(UFTE+GFTE<0.12,2,IF(UFTE+GFTE<0.18,3,IF(UFTE+GFTE<0.24,4,IF(UFTE+GFTE<0.3,5,IF(UFTE+GFTE>0.3,6))))))) **Eq. 2**

Teaching Matrix	
1. What percentage weight do you want the teaching component to account for in your	
evaluation? Default value is based on FTE calculation	
Student Credit Hours/ Teaching Load:	
2. What is the total SCH for undergraduate level courses taught?	
3. What is the total SCH for graduate level courses taught?	
Student Evaluations:	
4. What is the total number of Inferior ratings received in all student evaluations?	
5. What is the total number of Average ratings received in all student evaluations?	
6. What is the total number of Superior ratings received in all student evaluations?	
Advising Evaluations	
7. How many undergraduate students did you advise?	
8. How many MS committees did you serve on?	
9. How many MS students did you advise?	
10. How many PhD committees did you serve on?	
11. How many PhD students did you advise?	

Student credit hours (second metric) also are calculated based on the credits for a class and the number of students enrolled for undergraduate (U) and graduate (G) classes. Student credit hour production is ranked by Eq. 3.

 $\begin{array}{c} RankSCH = IF(U^*0.25 + G < 20,1,IF(U^*0.25 + G < 40,2,IF(U^*0.25 + G < 60,3,IF(U^*0.25 + G < 80,4,IF(U^*0.25 + G < 100,5,IF(U^*0.25 + G 3 > 100,6)))))) & \textbf{Eq. 3} \end{array}$

Students fill out a student evaluation form (third metric) at the end of the semester (Table 2). The

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Table 2. Student Evaluation Form COURSE NUMBER: NAME OF INSTRUCTOR:_ COURSE TITLE: SEMESTER TAKEN: 1. Teacher's apparent familiarity with subject. Extensive Average Limited 2. Teacher's ability to convey his or her knowledge about the subject. Above average Average Below average 3. Teacher's ability to stimulate interest in the subject. Above average Average Below average 4. Teacher's apparent attitude toward the subject. Enthusiastic Average Bored 5. Teacher's apparent attitude toward the students. Sympathetic Average Unsympathetic 6. Teacher's impartiality in grading. Fair Average Biased 7. Teacher's annoying mannerisms. Seldom exhibits Average Often exhibits 8. Organization of the course. Excellent Average Poor Part II. 1. How could the instructor improve his or her presentation of the course material? 2. What is the instructor's greatest weakness as a teacher of this course? 3. What is the instructor's greatest contribution to the course? 4. Contrast the teaching of this course with the teaching of the other courses you are taking this semester. Superior Average

percentage of students ranking the class as inferior, average, or superior is determined from the last question on the form. This is converted to a ranking for student evaluation (RankS) by Eq. 4:

Inferior

5. Remarks:

$$\label{eq:rankS} \begin{split} & \text{RankS=}(\text{IF(inferior}>50\%,1,\text{IF(superior}<40\%,2,\\ & \text{IF(superior}<50\%,3,\text{IF(superior}>90\%,6,\text{IF(superior}\\ & >75\%,5,\text{IF(superior-inferior}>50\%,4)))))) \end{split}$$

Eq. 4

The department head ranks the faculty member from 1 to 6 (representing the fourth metric to the teaching component of merit) based on exit interviews with graduating seniors and personal inclass observations.

Student advising (fifth metric) is based on number of undergraduate or graduate students that a faculty member advises and the number of graduate committees. Serving on an M.S. committee is worth the same as advising two undergraduate students. Serving on a Ph.D. committee is equivalent to advising three undergraduates. Serving as the advisor for M.S. students is worth three undergraduate students, and serving as the adviser for a Ph.D. student is worth five undergraduate student. Total points are ranked (RankAdv) by Eq 5:

 $\begin{array}{l} RankAdv = IF(points < 11, \\ 1, IF(points < 21, 2, IF(points < 3, 3, IF(points < 41, 4, IF(points < 51, 5, IF(points > 51, 6)))))))\\ \underline{\textbf{Eq. 5}} \end{array}$

The five metrics (equations 2 through 5 and department head ranking) are averaged to achieve an average ranking and evaluation scale for teaching effort.

Research Evaluation Methods

The system is divided into two metrics. The first evaluates all forms of research output in the form of publications. Points are given for different type of publications (Table 3) and then the total points converted to points per FTE based on the faculty member's research FTE.

After calculating the publication/FTE points (P), each professor is ranked (RankP) from 1 to 6 using a nested calculation (Eq. 6).

 $\begin{array}{l} RankP = IF(P < 75, 1, IF(P < 125, 2, IF(P < 175, 3, IF(P < 200, 4, IF(P < 250, 5, IF(P > 250, 6)))) \\ \underline{\textbf{Eq. 6}} \end{array}$

Less than 75 points results in a rank of 1. Points over 250 still result in a rank of 6, so that a highly productive faculty member who produces many publications/FTE does not skew the ranking system for the remainder of the faculty.

This figure is then reduced by 10% if the faculty member has a state-supported technician working for them.

The grant metric (Table 4) is calculated on total grant dollars, where each professor is the principal or co-principal investigator (PI) of the grant. The grant amount in dollars (D) per year directly administered by the PI is then Eq. 7).

Table 3. Faculty Evaluation Input for Publication Matrix for Full (F), Associate (C), and Assistant (T) Professors

Publication Matrix:	Point Scale		
	F	С	T
1.What percentage weight do you want publications to account for in the research component of your evaluation50%-100%? Default value is FTE=0.8*0.75 (1-Teaching FTE-Other FTE). The other 25% of research is from the grant matrix (table 4).			
2. Are you currently assigned a hard money technician?(Yes)(No)			
3. What percentage weight do you want the research component to account for in your evaluation50%-70%?			
4. What is your tenure rank? F=full, C=associate, T=assistant			
5. How many journal articles, that you have (co)authored, will appear in print this year?	25	25	25
6. How many research bulletins, that you have (co)authored, will appear in print this year?	25	25	25
7. How many research reports, that you have (co)authored, will appear in print this year?	5	5	5
8. How many book chapters, that you have (co)authored, will appear in print this year?	25	20	20
9. How many proceedings, that you have (co)authored, will appear in print this year?	5	5	5
10. How many abstracts, that you have (co)authored, will appear in print this year?	1	1	1
11. How many variety releases, that you have (co)established, will appear this year?	25	25	25
12. How many extension reports, that you have (co)authored, will appear in print this year?	0	10	10
13. How many books, that you have (co)authored, will appear in print this year?	200	200	200
14. How many patents, that you have (co)established, will appear this year?		25	25
15. How many software releases, that you have (co)authored, will appear this year?	25	25	25
16. How many popular press interactions have you had this year?	1	1	1

Table 4. Faculty Grant Inputs for Grant Matrix

	Grants Matrix
1. What percentage v	reight do you want grants to account for in the research component of
your evaluation?	(Default value is 25% of research weight)

What is the total dollar figure for grants you have had funded this year?

The final research index is weighted 75% of the publication metric plus 25% of the grant metric, but again, this can be changed by negotiating with the department head at the beginning of the year (Table 4).

Service Evaluation Methods

The service metric (Table 5) is divided into recruiting, community, department, university and professional service. The percentage of service effort in each area is negotiated with the department head

at the beginning of the year with the discussion of a faculty member's goals and objectives. If the faculty initiates no negotiations, then the department head assigns a percentage based on the information in the faculty evaluation form (Table 5). A targeted score for each service area is calculated based on the FTE assigned for service (default percentage = 20% of research appointment), and the number of hours

spent on an activity divided by the total available hours for service. Consequently, if all service was in one area, then the faculty member would have to spend 200 hours on that service activity if his service percentage was 10% of his total time. The department head, based on information submitted by the faculty, estimates the actual hours spent on the activity. A ratio of actual to target is calculated (R) and this number assigned a rank (Eq. 8).

Rank=IF(R<0.4,1,IF(R<0.6,2,IF(R<0.8,3,IF(R<1,4,IF(R<1.2,5,IF(R>1.2,6))))))

Eq. 8

Other Category

Some faculty members have special appointments for administration services, and these represent a separate FTE and dollar merit amount. The department head ranks the "other" category on a 1 to 6 scale and divides the number by the FTE.

Calculation of Merit Dollars

The department receives dollars from the Dean of the College of Agriculture based on the research and teaching FTE that the department conducts. In the first method of calculating merit, dollars available are divided into research, teaching and service dollars. Then, the percentage of the amount assigned to each faculty member for merit is calculated, based on the percentage of points compared to the total points of all people receiving merit in that category. The other

Table 5. Faculty Service Inputs for Service Matrix	
Service Matrix:	
1. What percentage weight do you want the service component to account for in your	
evaluation? (20% of research is the default value).	
Recruiting Service:	
1. What percentage weight do you want recruiting to account for in the service component of	
your evaluation? 0% - 100%	
2. How many hours did you spend performing recruiting activities?	
Community Service:	
1. How many hours did you spend performing community related service activities?	
Department Service:	
1. How many hours did you spend performing department related service activities?	
University/College Service:	
1. How many hours did you spend performing university/college related service activities?	
2. How many hours did you spend performing professional-affiliation related service	
activities?	

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categories are calculated the same way by adding total points and dividing this number into the points for each faculty member.

In the second method of assigning awards, the rankings are averaged and the total dollars prorated according to average rank. The department head then adjusts the final ranking and merit dollars based on comparison of the two methods. Using two methods of calculating ranking, one weighed by percent time appointment in each category and one simply averaged over all activities, gives the department head additional flexibility when evaluating faculty.

Results and Discussion

An effective merit system occurs early in the evaluation cycle to allow time for the individual faculty, department, college and university to have input into goal setting (Braskamp and Ory, 1994). University goals should satisfy the needs of the legislature and public and be specific enough to lead the university's direction and achievement. The goals of the department and individual faculty should be reviewed with the department head annually and modified through negotiation as needs of the faculty, department, college, and university change. Credit for different activities should then be adjusted to foster the growth and development of the faculty member while meeting the goals of the institution (Braskamp and Ory, 1994). Originally, the Department of Agronomy and Horticulture had no quantifiable system of evaluation. A committee of senior faculty developed a relatively simple merit system that was then modified by the department head. The current system instituted in 1988 could easily be simplified further in terms of the scaling functions and components of the matrices if adopted by other organizations. The scales in each matrix could be adjusted to a scale of 1 to 5 instead of 1 to 6 whereby the mid-point is the average performance rating.

Teaching Component

The overall teaching goal of the department is to increase student numbers while maintaining quality. as the university receives state funds based on student numbers. Enrollment at both the graduate and undergraduate level in the department has increased over time. Thus, the total number of undergraduate and graduate students per teaching FTE in the department has increased (Figure 1). Thus, it would appear that the merit system which rewards teaching is having the desired effect of increasing student numbers. Furthermore, student numbers have decreased when effective teachers left the department, and positions were open for more than a year. When these positions were refilled, student numbers then increased. Consequently, good teachers are needed to attract students. If the SCH production was not increasing, the merit system

might need adjustment to encourage greater productivity. Nevertheless, meeting department goals does not necessarily mean that the system is fair to participants. If inequities exist (real or perceived), individual faculty can negotiate the weighting percentage for each activity during the annual evaluation to be applied for next year evaluation. However, this may not entirely eliminate inequities if the department head pays more attention to the average method of calculating ranking rather than the weighted method because the averaging method does not have a method to give additional weight to teaching compared to research and service.

The system gives more weight to teaching larger classes which encourages faculty to teach the introductory courses vs graduate level classes which

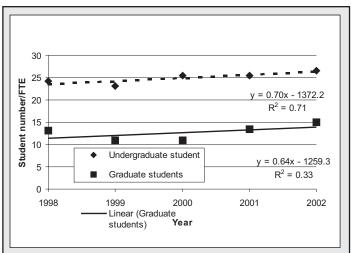


Figure 1. Undergraduate and graduate student enrollment per FTE for the Agronomy and Horticulture Department, New Mexico State University, Las Cruces N.M.

normally are smaller (five to ten students). Some faculty do a better job teaching undergraduate vs. graduate classes and teaching styles of professors are different with some teaching styles working better for undergraduate classes. Consequently, the teaching merit system rewards teaching styles most appropriate for undergraduate classes. This is definitely good for the teaching goals of the department, but favors undergraduate courses vs graduate courses which may be detrimental to the long-term research goals of the department and university. The current system averages the scores for the different ranking metrics, but the different metrics could be weighted rather than averaging to shift emphasis to one category or another.

The problem with teaching merit is that the current system, as well as other systems, rely on the subjective measure of quality. Currently the matrix does not include a teaching evaluation by senior faculty who have received teaching awards (master teachers). The reason for this discrepancy may be that the faculty do not desire to grade each other. Additionally, asking the department head to evaluate

the teaching quality by attending lectures may only work in small departments. The time required in a large department exceeds the department heads' time resources. Also, the department heads may not have training to adequately evaluate teaching quality.

Research Component

The department's research goal based on an average ranking of 3 with each faculty accumulating 175 points with either seven journal articles/FTE, or a combination of journal articles, proceedings, or Agriculture Experiment Station (AES) and Cooperative Extension Service (CES) publications (equation 6). Grants should total \$150,000/FTE per year for a score of 3 (equation 7). Faculty receive a score of 6 if they bring in more than \$300,000/FTE/yr or publish more than eight journal articles/FTE. The department has never reached the goal for number of journal articles per FTE (Figure 2) and the target should be revised to better reflect the actual productivity of the department. Three journal articles or 75 points/FTE may be a more realistic goal.

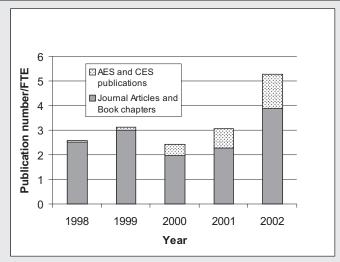


Figure 2. Publications per FTE for the Agronomy and Horticulture Department, New Mexico State University, Las Cruces, N. M. AES publications are Agricultural Experiment Station publications. CES publications are Cooperative Extension Service publications.

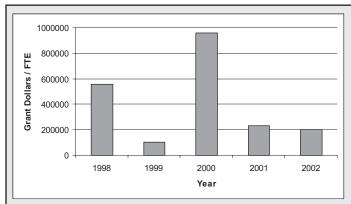


Figure 3. Grant dollars per FTE for the Agronomy and Horticulture Department, New Mexico State University, Las Cruces, N.M. where \$150,000/FTE/yr is the goal.

The department achieved that publication goals in 1999 and 2002. Either the scaling factor or the weighting factor (current 25 points/journal article) for a journal article needs to be increased. Additional points could also be given for AES/CES publications but the current college administration emphasizes journals articles, rather than college publications, as a vehicle to increase the prestige of the institution and presumably increase external funding.

The department exceeded the goal for grants dollars generated per FTE in four of five years in the evaluation period (Figure 3). Several large grants in 1998 and 2000 resulted in the department's greater grant dollars. Thus, the years 1999, 2001, and 2002 may be more representative of the long-term grant productivity of the department. Consequently, from the department evaluation the method of rewarding grants appears to be working successfully, with the number of faculty reaching the department goal increasing over time as shown by the steady level of grants/FTE (Figure 3). However, the system is not designed to reward adequately faculty that receive large grants. A bonus system from the college or university may be a more appropriate method to encourage the pursuit of large grants.

On average, the faculty generated about \$360,000/FTE/yr in grants resulting in 3.4 publications/FTE/yr over the five-year study period. In contrast, during a five year time period (1997-2001), the US Forest Service averaged 3.94 publications/FTE at a cost of \$288,098/FTE, while university forestry faculty averaged 2.87 publications/FTE at a cost of \$303,853/FTE (Thompson and Bullard, 2004). The grant dollars generally do not include faculty salaries, which approach \$100,000/FTE (salary + fringes). Thus, it appears the faculty generate more research dollars/FTE, but fewer publications/dollar. Thompson and Bullard (2004) reported a cost of \$73,000 to \$106,000/publication, which suggests a more reasonable goal of 4.6 to 6.3 publications based on the grant dollars generated. While higher than the department average, it is still lower than the target of seven journal articles/FTE. Again, suggesting this standard should be lowered. The current system encourages neither experiment station nor extension publications. While, none of the faculty have extension appointments, several focus their research on client needs in the state. For these faculty, the system could be modified to encourage these types of publications.

Service Component

Faculty members spend about 20 to 30% of their time serving on committees and college support activities. Every faculty member serves on one or more department committees (Anon., 2003) covering areas from curriculum to endowed chairs and visiting lecturers. Seven faculty members participate in regional research projects that meet

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yearly to coordinate activities among states and bring new and innovative research ideas to the university and department. However, the current system of awarding credit for service, based on a description of activities, is time consuming and does not rank the effort according to the goals of the department. A department cannot serve all needs and must prioritize service activities. The service component of the merit system should define service activities and give points for each activity as in the case of publications. If a new service activity is not on the list of activities defined by the department head, points for this particular service should be negotiated with the department head at the beginning of the year.

Recruitment, as conducted at the department level, along with teaching, has increased student numbers, and each faculty member is expected to spend time on recruiting activities. However, recruitment needs to be assigned points like other service activities. Recruitment activities range from development of new brochures or a department Web site, to presentations before high school classes or student clubs. If a point system were developed, the faculty member could concentrate on the most productive recruiting activities. Currently, recruitment activities are based on the time spent recruiting whether the time is effectively spent or not. While the evaluation of service seems to reward faculty, the process could be improved if points for service were tied directly to some measure of productivity (e.g. number of high school visits), as is done for research and teaching. Assigning points for activities would make the process easier to implement by the department head.

Sensitivity of the Merit System

In 2003, the average pay raise for all professorial ranks in the College of Agriculture and Home Economics was \$1,900 (average = 2%). This dollar amount along with an average score of 4 in each evaluation equation was used for sensitivity analysis of the merit system. Assumptions included a 20% teaching appointment, a 64% research appointment, and a 16% service appointment as default values because most of the faculty have a 20% teaching appoint and only two faculty have a 35% teaching appointment. The average score of 4 was used for the basis of demonstration and because the score of 4 was close to the average score for all the faculty. The actual score for the department were not available for privacy reasons. Increasing the research score to a new score of 6 resulted in a 25% change in merit (0.39% increase/% R) compared to only 12% for the same change in teaching (0.60%/%T) (Figure 4). The slope of the line for research is steeper than for teaching. Thus, changes in research productivity can effect greater change in performance than teaching. This sends the message that efforts by a faculty member to improve merit, given limited time and

resources, should be directed toward increasing the research ranking. This may be the incorrect message a department head wants to send, especially when state funding is tied directly to enrollment, and especially undergraduate enrollment. Ideally, the slope of both lines should be identical, if each has equal importance to a land grant institution.

The evaluation tool also can be used by the

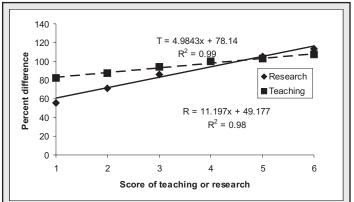


Figure 4. The change in merit percentage compared to average pay with changing teaching and research merit scores. All other component scores were held constant at 4 as teaching or research scores changed from the average of '4'.

faculty to self evaluate. Braskamp and Ory (1994) advocate that faculty documents should include both descriptions and judgments of their work activities and their contributions as evidence that the administration can use not only in merit evaluation but also the faculty can use in self-reflection, discussion, and dialogue with administrators and other faculty members. Growth of a faculty member must be based on continuing evaluation of that person's strengths and weaknesses. The evaluation tool, in most cases, represents a snapshot of the faculty's skill and productivity but does not include self-evaluation or a section describing the faculty's plans for change and growth. These need to be included in any good faculty evaluation form. The faculty also must become more involved in the evaluation system if it is to be effective and used to its full potential by the faculty and administrators.

An improvement to the system would be to adjust the scaling factors as information is gained about how the faculty perform relative to the initial standards. The scaling factors may need to be changed based on the general performance of the department. Any merit system should be adjusted over time but with concurrence from the faculty. The faculty must support the system in order for it to become an active document subject to change.

Summary

The merit system appears to work satisfactorily for this department. Furthermore, the weight factors can be adjusted to reflect the changing needs of the department through time. However, improvements in the service area method of ranking might make the merit system easier to implement. To be successful, however, faculty should be completely involved in the merit process from goal setting at the beginning of the year to final evaluation. A system of using average departmental scores instead of weighted scores based on individual negotiations, diminishes the purpose of the merit system. The system has a built-in method to give more weight to teaching, but this requires the faculty take an active role in the evaluation process by negotiating this percentage weight at the beginning of the evaluation period. The system can be used in institutions of higher learning where teaching, service and scholarly activities are emphasized. Without such a system, faculty may feel less control over their financial destiny and over time decreased productivity may result. A merit system that is used to only allocate money and not used to improve faculty skills is not an effective merit system. The described merit system has all the tools to be an effective system but the department head must create an atmosphere that encourages and even insists on faculty participation for the tool to be used to its fullest potential.

Literature Cited

Anon. 2003. Department of Agronomy and Horticulture, Department of Extension Plant Science Program Review for USDA/CSRESS. College of Agriculture and Home Economics, NMSU. Internal publication. Agronomy and Horticulture Department Web Site 2004. http://aghort.nmsu.edu.

Braskamp, L. A. and J.C. Ory. 1994. Assessing faculty work. San Francisco: Jose Bass, 333 p.

- College of Agriculture. 2005. College of Agriculture New Mexico State University report. http://cahe.nmsu.edu/docs/CAHEchart.pdf
- Etzioni, A. 1933. The spirit of community: Rights, responsibilities and the communitarian agenda. Crown, New York.
- New Mexico State University. 2003. Policy manual. http://www.nmsu.edu/manual/.
- Thompson, D.H. and S.H. Bullard. 2004. History and evaluation of the McIntire-Stennis cooperative forestry research program. Forestry and Wildlife Research Center, Miss. St. Univ. Res. Bull. FO269, 57 p.
- Rice, R.E. and L. Richlin,. 1993. Broadening the concept of scholarship in the professions. In L. Curry, J. Wergin and associates. Education Professionals. San Francisco: Jose-Bass.
- Ulery, A. L., T.W. Sammis, and J.G. Mexal. 2004. A mentoring program that helps untenured faculty navigate the academic maze. NACTA Journal 48:46-51.
- University of New Mexico. 2005. Budget environmental scan. http://www.unm.edu/summit/EnvScan_3-8-05.htm
- Weistroffer, H.R., M. A. Spinelli, G. C. Canavos, and F. P. Fuhs. 2001. A merit pay allocation model for college faculty based on performance quality and quantity. Economics of Education Review 20(1):41-49.

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