

## **M.A.P.s: Mentoring Assistant Professors**

### **Navigating the maze of academia in an Agronomy and Horticulture Department**

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#### **ABSTRACT**

Mentoring programs have been important in the business environment and public school education. However, there has been little interest in mentoring university faculty except as it relates to discrete portions of the population, e.g. women and minorities. Furthermore, there has been little information on mentoring programs in agricultural colleges. We present five studies of the M.A.P.s program (Mentoring Assistant Professors) initiated in 1993 in the Department of Agronomy and Horticulture. Not all the examples are positive, but the mentoring program has improved the success rate in the tenure and promotion process and raised the level of comfort of new faculty as they navigate this difficult journey. However, the program has not expanded to include associate professors seeking promotion. Suggestions for sustainability and improvement of M.A.P.s include educating both the mentors and protégés as to their respective responsibilities, providing rewards for mentoring, incorporating progress timelines and milestones, and using case studies to help avoid common pitfalls in the mentoring process.

#### **INTRODUCTION**

The concept of a Mentor can be fairly easily envisioned, but a definition is more difficult to construct. For example, Cochran (2001) states a mentor should “provide support, information, background, and encouragement, and (be) available to discuss any aspect” of the job requirements. However, Mullen (1998) defines a mentor as one that provides vocational development, as well as psychosocial support. Furthermore, some feel that mentors can not be assigned protégés, rather they must “find each other” (Kuyper-Rushing, 2001). Lary (1998) goes so far as to say that mentors can not even be in the same area of specialty. Thus, many authors state that formal mentoring programs have little utility.

In spite of these concerns, many business organizations have instituted formal mentoring programs. The rationale for forming mentoring programs is often couched in terms of “nurturing” (Wright and Wright, 1987), “organizational culture” or “value of care” (Erikson, 1963; Levinson et al., 1978). While these may be important at a personal level, they are near meaningless at an institutional level. The fact is successful mentoring programs save money for the institution. Hiring someone is the least expensive component of a career shortened by poor staff development or a poor fit. A faculty member that is denied tenure in the sixth year may cost an institution over \$500,000. The dollar cost of a poor academic fit only includes tangible expenditures of time and money. It does not include the noncommensurable costs associated with the denial of tenure. When someone is denied tenure or terminated, there is, or should be, a sense of failure on both parts. The job requirements were not adequately explained, the new employee misrepresented themselves, the responsibilities changed, or a combination of these occurred. Externally, there also are costs. Students are dissatisfied with the level of instruction and lack of consistency. Departmental productivity declines in grants, publications and graduate student research. Clientele are not adequately served during the time the position is vacant, while the soon-to-be unemployed faculty member serves in that capacity, and while a new search is conducted. This can damage the reputation of the entire university.

In order for a mentoring program to be successful, the mentor and new faculty member must be able to communicate easily and develop a rapport that allows the new faculty member to ask candid questions. This may not be possible if the senior faculty member that serves as mentor has not maintained their knowledge level about the discipline and consequently may not understand the needs of the new assistant professor or the expectations of the current administration (Durrant, 1988). Gender and race should not be an issue when selecting a mentor, but often it can influence the rapport between the mentor and protégé.

Another potential problem is the academic department of the mentor. In departments that are primarily academic, a mentor from another department might be preferred so that personal motivation or professional jealousy of the mentor does not interfere with the process of mentoring. On the other hand, knowledge about the discipline and the internal politics of the department may be helpful, especially in a department with strong research or extension components in addition to academic programs. While new professors might be perceived as competition by some faculty, one of the benefits of mentoring should be renewed interest and vigor in teaching, extension, and research, as well as access to more funding (aimed at new faculty) and new equipment (from start-up packages).

Furthermore, the social skill of the mentor is important, as not all professors make good mentors. As in any relationship, it is inappropriate and ultimately disappointing to expect one mentor to satisfy all needs of a protégé. Thus it may be beneficial to encourage mentoring on several levels and across departments or disciplines. Since new faculty have multiple needs including: developing research and teaching programs, adjusting to a new locale, and learning the university organization, a group format may provide more effective mentoring (Pierce, 1998). As with the concept that “it takes a village to raise a child”, it is also true that it takes a department (or university) to “raise” a professor. According to Luna and Cullen (2002), there is scant literature summarizing or analyzing mentoring programs in universities. This paper reports our experiences with a mentoring program for assistant professors in the Department of Agronomy and Horticulture and proposes guidelines for mentors.

## **Background**

The Agronomy and Horticulture Department was formed in 1986 from the merger of the Crop and Soil Science department with the Horticulture department. The department consists of 20 faculty, including 3 off-campus faculty with exclusive research appointments. There are 8 professors (6 male/2 female), 5 associate professors (5/0), 6 assistant professors (5/1), and 1 open position. The average teaching appointment of the faculty is 25% with 75% research appointment. The department offers 5 B.S. degrees, 3 M.S. degrees, and 1 Ph.D. degree with a current enrollment of 105 undergraduates and 60 graduate students. The department is unique in that it has always had a high percentage of female students, and was the first in the College of Agriculture and Home Economics to hire a woman to a teaching/research position outside of Home Economics. However, like most departments it had done little to actively assist young faculty of either gender in the tenure process.

A mentoring program was set up in the Agronomy and Horticulture Department in 1993 with the mentor assigned to a new assistant professor by the Chairman of the Promotion and Tenure committee. The role of the Mentor in the department was to guide an assistant professor through the promotion and tenure process at New Mexico State University and serve as an advocate for the candidate during the departmental deliberations. The outcome, hopefully, was a faculty member that moved through the promotion ranks rapidly and was respected not only within the institution, but also nationally among their peers. Mentors were selected from reasonably successful professors in similar fields as the protégé, and who were seemingly compatible with the protégé. In spite of a lack of formal guidelines, the mentoring program has been reasonably successful at the assistant professor rank because the threat of tenure denial is real. However, the program has been less successful at the associate professor ranks because

there is no real threat of job loss, and there has been a lack of administrative support. The successes and failures of the program led to the conclusion that without a formal structure and support of the program, the mentoring program could not be as successful as it should be. The following list of activities has resulted from our evaluation of the program.

### **Mentor's Responsibilities**

The Mentor's role is to help the new professor balance the requirements of teaching, research, and service in a demanding environment. Former NMSU Vice-President Donald Roush said a faculty member must be good in at least two of these three areas. However, often a new faculty member has difficulty balancing the many demands of committees, clients (including students and the public), teaching, and research. In meeting the goals of the mentoring program, the mentor should:

1. Meet with the new faculty member on a regular basis to help the new member adjust to the new responsibilities. Ideally, these meetings would be monthly when the faculty member is new. As the protégé matures, the meetings would be less important, but should still occur several times throughout the year.
2. Explain the criteria for achieving promotion and tenure. Be specific, and be sure the recommendations conform to the protégé's job description, as well as the expectations of the departmental Promotion and Tenure Committee and the Department Head.
  - a. Teaching (committed, proficient, with better than average student evaluations).
  - b. Research (i.e. publications). How many, and what type. The College of Agriculture and Home Economics guidelines highlight only one section of the entire promotion and tenure document, viz. "*Publication in refereed scholarly journals precedes other evidence of professional stature*" (College of Agriculture and Home Economics, 1996).
  - c. Grants (this is just a means to an end). Grants allow a faculty member to hire students or technicians and conduct research. However, if the research does not result in publications, little value is attached no matter the amount of grants received.
  - d. Students: undergraduate and graduate advising, or heavy concentration in one.
  - e. Service: icing on the cake. A little is needed, but service will not compensate for poor productivity and research or poor performance in teaching. An exception might be support of commodity groups, such as chile or alfalfa growers or student clubs, such as the National Flower Judging competition.
3. Council the protégé on the types of documents and narratives required for the Promotion and Tenure package. Members of the P&T committees are required to read only the first 50 pages of a package. However, an excellent document can be presented in much less than 50 pages.
  - a. Two forms of teaching evaluation. The first (student evaluations) is easy, the second is often overlooked. The mentor could serve as an outside evaluator, or could recruit other faculty with good teaching skills to evaluate and critique the protégé.
  - b. Supporting letters of appreciation from other faculty, public educators, and Cooperative Extension Service faculty.
  - c. A complete resume, in addition to the portfolio being developed.
  - d. Brief synopses of research activities.
  - e. List of abstracts and papers presented.
4. Help the new faculty member find resources.
  - a. Teaching improvement programs, such as Writing Across the Curriculum, Peer Coaching, or Center for Educational Development seminars on teaching improvement.
  - b. Equipment (what is available and which faculty are cooperative).
  - c. Funding sources (grant writing workshops, special research programs available only to their particular institution or discipline).

- d. Publication assistance. Suggest ideas for research or collaboration. Faculty often concentrate on publishing their research and overlook the opportunity to write about teaching activities. Since ‘research’ actually means ‘publishing’, this allows a faculty member to ‘double-dip’ by getting research credit for their teaching activities.
5. Help the protégé meet people on campus and in the community that might be potential resources. By the same token, it is also useful to know what type of activities or people to avoid. For example, getting drawn into counterproductive projects, or agreeing to work with unreliable or undependable colleagues can frustrate a new faculty member.
6. Other duties might include:
  - a. Offer to evaluate the annual performance document. Much of the material in the annual performance document should be applicable to the Promotion and Tenure document. The mentor could help avoid any overlooked activities.
  - b. Work with the department Awards Committee to nominate the protégé for college or university awards.
7. The mentor should review mentoring activities annually with Department Head during evaluations and with the Promotion and Tenure Committee. To make mentoring a sustainable and profitable practice, appropriate training, resources and rewards need to be provided by the administration to demonstrate its support.
8. If a mentor could be assigned prior to actually hiring the protégé, the mentor along with the department head could serve as an advocate for the new professor during negotiations for salary and start up package with college and university administration.

## **DISCUSSION**

Universities, colleges, and even departments often have different criteria for judging success in the teaching, research and service components of a position. Thus, it is crucial that departments have mentors that understand the nuances of each unit and provide sound professional advice to protégés. These mentors may not necessarily provide the psychosocial needs, but that function usually can not be forced upon a protégé anyway. Nominally, psychosocial needs are met by a mentor/protégé relationship that develops outside of structured programs (Mullen, 1998). However, there is scant evidence that even the professional (academic) mentoring is readily available in agricultural sciences. Much of the mentoring literature deals with women (Brennan, 2000; Garner, 1994) or minorities (Culotta, 1993). There is little published information on mentoring university faculty to aid retention and success.

To estimate the resources allocated by different disciplines toward mentoring programs compared to resources allocated toward a basic research area, a literature search was conducted on the major search engines at the New Mexico State University library web resources. The key search words were ‘water’, ‘mentoring’, and ‘mentoring’ combined with ‘teaching’ (Figure 1). The assumption was that the number of citations on a topic was indicative of the effort devoted to that subject. In the case of mentoring, the number of citations would be indicative of the effort devoted to the training and retention of human resources. The mentoring and teaching variable separated articles orientated toward a mentoring program of teachers from those that dealt with mentoring in general, including the business environment. An article in the mentoring and teaching area could include anything from K-12 to university instructors.

Agriculture and engineering spend the least effort on human resource development relative to the effort on physical resources (Figure 1). There were over 3,000 references on water for every one on mentoring, and over 29,000 to every one on mentoring and teaching. Business devotes considerable effort to understanding human resources and cultivating the effective use of human resources compared to natural resources. There were over 1,200 citations on mentoring. However, there were relatively few citations in the combined mentoring and teaching field. The Social Science field expended more effort than Business indicating that at the University Level

mentoring programs are probably more important in Social Science departments than in the Business or Humanities. Perhaps not too surprising, the Education field devotes the greatest attention, both in absolute numbers and in relative importance. Apparently, mentoring in teacher training programs is considered important. However, this does not seem to have translated into effective mentoring programs in the university at large. Universities apparently are not putting much effort into mentoring, as least as reflected in the published literature. Universities tend to have a Darwinian 'survival of the fittest' mindset, although this attitude appears to be changing, since the articles on mentoring and teaching all have been published since 1992.

The mentoring program in the Agronomy and Horticulture Department seems to be working but additional activities could improve the program. Obviously, a mentoring program does not guarantee all protégés will be successful. Some people are likely better suited for jobs that are 100% research such as those in the USDA Agriculture Research Service or private industry or 100% teaching in smaller universities. Also, a mentoring program may be more successful in institutions with larger programs to better match personalities and disciplines. Expecting one person to be excellent in all areas of research, teaching, and service is unrealistic and larger schools can draw on different faculty for different skills. While the Agronomy and Horticulture Department is relatively large, it oversees several degree programs, and each discipline is usually only represented by one faculty. Thus, the choice of mentors is limited. Ours is a case where "the group as mentor" (Pierce, 1998) may be most advantageous. All senior faculty should develop a mindset that it is their responsibility to help the younger faculty succeed.

When a person does not appear to be making satisfactory progress toward tenure, the department head, along with the mentor, should point out shortcomings and suggest avenues for improvement. Consequently, a mentoring program cannot be fully successful without the support of the administration and the administration's willingness to spend the time and effort to make the mentoring process work.

The guidelines listed above are suggested responsibilities or 'action' items that may improve the quality of mentoring. Ideally, to fulfill these responsibilities, certain skills are required and certain actions are needed. Workshops could be conducted to teach these skills and convey information needed by the participants. In fact, some universities have been willing to pay for pilot mentoring programs (Curtis, 2000).

## **CONCLUSIONS**

Mentoring can be beneficial to the protégé by assuring their career success, by reducing the anxiety of gaining tenure, and by avoiding surprises during the early career stages. It also can be beneficial to the mentor if joint publications occur because the protégé has learned the value of publishing and repays the mentor for their effort. Also, being a mentor keeps the faculty member current on the latest technology brought into the department by new professors. Obviously, the department benefits by enhanced stature and more productive faculty.

A mentor and protégé both need to understand their responsibilities as far as the program is concerned and to make a good faith effort in making the program a success. The faculty must have a philosophy of sharing experiences, resources and time. Consequently, the guidelines need to be written and incorporated into the operation of the department. A mechanism should be established for the protégé to be reassigned to a new mentor if the system is not working without jeopardizing the tenure process for the protégé.

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Figure 1. Citations related to water, mentoring, and mentoring in teaching retrieved from different search engines in agriculture (Agricola ■), science and engineering (AS&T Abs ■), arts and humanities (A&H Search ■), social sciences (SocSci Abs ■), business (Bus Source ■), and education (ERIC ■).

