A Mentoring Program that Helps Untenured Faculty Navigate the Academic Maze[1]

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Abstract

Mentoring programs have been shown to have a strong impact 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 is very little information on mentoring programs in agricultural colleges. We present five case studies of the M.A.P. 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.Ps 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. A mentor should "provide support, information, background, and encouragement, and (be) available to discuss any aspect" of the job requirements (Cochran, 2001). Mullen (1998) defined a mentor as one who provides vocational development, as well as psychosocial support, but basically, it is a relationship between a more knowledgeable faculty member and a less experienced individual (Galbraith and Cohen, 1995).

Some feel that mentors cannot 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 precautions, many business organizations have instituted formal mentoring programs. The rationale for employing 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 difficult to rationalize at an institutional level. However, the bottom line is that 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. Recruiting, interviewing, and moving a new faculty member costs roughly $20,000 (Taylor, 2002). Most of this cost includes faculty and administrative time to review resumes, interview the candidate, attend seminars, and entice the candidate to accept the position. Once on campus, the new employee will cost the institution over $75,000 per year in salary, benefits and supplies. So, if a faculty member is denied tenure in the sixth year, that mistake can cost an institution over $500,000. Furthermore, the lost time may result in a competitive advantage for rivals. Industry can little afford this handicap. This may be why industry mentoring programs are viewed as more successful than academic programs (Anon., 2000). Industry understands the economics of hiring, training and retaining valuable employees.

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 a sense of failure on everyone's part. The job requirements were not adequately explained, the new employee misrepresented themselves, responsibilities changed, or support was lacking. 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 sometimes extensive transition period between letting one faculty member go and hiring a new one. All of the factors above can damage the reputation of the entire university.

Mentoring relationships normally have four phases initiation, cultivation, separation and redefinition (Kram, 1985). In order for the first and second phases to occur and 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 safely ask candid questions. This may not be possible if the senior faculty member that serves as mentor has not

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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 teaching-oriented, 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 new faculty should be renewed interest and vigor in teaching, extension, and research on the part of the mentor, as well as access to more funding (aimed at new faculty), state-of-the-art techniques, and new equipment (from start-up packages).

The objectives of this paper are to propose guidelines for mentors and to report our experiences with a mentoring program for assistant professors in the Department of Agronomy and Horticulture at New Mexico State University (NMSU).

Methods

The Agronomy and Horticulture Department at NMSU 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, until 1993 it had done little to 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 the 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 among their peers. Mentors were selected from reasonably successful professors in similar fields as the protégé (new faculty member), 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 of the reduced threat of job loss and lack of support at the administrative levels. The successes and failures of the program are illustrated in case studies and led to our conclusion that without a formal structure and support of the program by the administration, the mentoring program was not as successful as it could be. The following guidelines have resulted from our evaluation of the program. The evaluation consisted of reviewing tenure and promotion decisions since the mentoring program had been put in place.

Results and Discussion

Proposed Guidelines for a Mentoring Program

The goal of a mentor is to help the protégé balance the requirements of teaching, research, and service in a demanding environment in order to perform the job to their fullest potential. 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. Guidelines that mentors may use to help a new faculty member navigate these responsibilities are proposed in Table 1.

The first step is to establish an effective mentoring relationship. The mentor can facilitate this by meeting with the new faculty member either formally or informally on a regular basis to help them adjust to their 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.

In their role as mentors, senior faculty need to help their protégés understand the relative importance of each component (research, teaching, and service) of their job. For example, service is like icing on the cake. A little is needed, but service will not compensate for poor research productivity or teaching performance. Exceptional service warrants the support of commodity groups, such as chile or alfalfa growers who can put outside pressure on the university. Student clubs such as the Soil Judging or National Flower Judging teams also offer rewarding service opportunities but take extra time. Untenured faculty, particularly women and minorities who are underrepresented at many institutions, may be asked to serve on many committees purely from a diversity point of view. However, they need to be cautious about

over-extending themselves by serving on too many committees. Their mentors should help them discriminate between valuable, rewarding service, and less productive and time-consuming opportunities.

Teaching is often listed as a minor component for many agronomy professors, yet its importance should not be underestimated, particularly regarding the professor's attitude towards students. Teaching performance should be proficient, with decent student evaluations. Undergraduate and graduate student advising contribute to the teaching portfolio.

Research is the major component of most of the professors in our department. Institutions are not interested in how much research has been conducted. They are interested in how many and what type of publications the research generated. 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). Grants are a means to an end, and allow a faculty member to hire students or technicians and conduct research. However, until research is published, it is essentially incomplete and peer-reviewed publications are higher priority than external funding.

The mentor should review mentoring activities annually with the Department Head during evaluations and with the Promotion and Tenure Committee. To make mentoring a sustainable and profitable practice, mentors should receive appropriate training, resources and rewards from the administration to demonstrate support for the program. Furthermore, the protégé should become trained in the process of mentoring so they can fulfill the duties in time.

The following case studies are included to illustrate some of the activities conducted by different mentor/protégé pairs and how those activities may have influenced the tenure decision.

Case Study 1 (male mentor/female protégé)

The assistant professor was assigned a mentor that had been in the department for 30 years. The mentor had been successful in horticulture research and had over 50 journal articles. He also had an excellent reputation for both teaching and extension (service) activities. Consequently, the mentor was a successful professor who was productive in the department. The assistant professor was hired in an area that complemented the area of the mentor. The mentor quickly developed a rapport with the new professor and offered guidance in working with commodity groups and developing a teaching program. Furthermore, the mentor and assistant professor published 7 journal articles together. No major issues occurred during any of the promotion and tenure process, and the assistant professor was ranked as one of the most productive researchers in the department, along with excellent teaching and service ratings. In fact, the protégé received the Distinguished Research Award from the college.

The mentor and protégé had offices near each other and talked extensively. They developed a mutual respect for one another and had similar temperaments. The assistant professor would have been successful without the mentor, but the mentor made the process easier by 1) guiding the faculty member to potential sources of grant money and commodity support, 2) writing articles with her, 3) helping her develop her teaching program, 4) providing a person to discuss ideas with and 5) being her advocate in the tenure and promotion committee. The mentor accomplished all of the items informally that are listed above. Furthermore, the relationship between the mentor and protégé continued until the mentor retired. Their relationship matured to one of colleagues. In addition to using her assigned mentor, the protégé actively sought and accepted advice from other faculty in the department in other areas of research, teaching, and academia in general, which undoubtedly helped her succeed.

Case Study 2 (male mentor/male protégé)

The assistant professor received his Ph.D. in this department but was located off campus in his new position, so communication was somewhat more difficult compared to Case Study 1. The mentor had served on the Ph.D. committee and was a successful professor in a similar discipline with over 30 journal articles. Rapport had already been established between the mentor and protégé and they published four articles together, including one journal article. The position carried no formal teaching assignment, thus the protégé was encouraged and opportunities were provided for the protégé to present guest lectures to demonstrate teaching competence.

The mentor guided the protégé in developing the promotion and tenure package and supported the protégé in the promotion and tenure committee meetings. He presented arguments defending the publication record of the protégé that was lower than anticipated at the time of the promotion and tenure decision, thus assuring the protégé's success. The unique aspect of this example is that the protégé received his Ph.D. from this institution and his major professor continued to serve in an advisory capacity as well. On the negative side, the assistant professor felt it was important to distinguish his program from that of both his Ph.D. advisor and mentor. Thus, the separation phase seemed to coincide with the cultivation phase of a mentoring relationship. Consequently, there was less collaboration and guidance in research and publishing, and a mentor that had not been involved in the graduate program of the protégé might have been better utilized.

Case Study 3 (male mentor/male protégé)

The assistant professor was assigned a successful and productive professor as mentor who had been in the department for 20 years and had over 50 journal articles. The mentor also had experience in extension

activities. Based on common interests, the mentor quickly developed a rapport with the new professor and guided him in his academic career until he received promotion and tenure. The mentor stressed the importance of publications and he and the protégé published three journal articles together. However, the protégé had a strong interest and desire to teach, and the small number of journal articles became an issue in both the department and college promotion and tenure committee evaluations. In addition to mentor encouragement, the protégé received annual written evaluations from the department head supporting the mentor's advice to concentrate on publications.

The strengths of the protégé were in the teaching and service components, and the combined research, teaching, and service package was sufficient to award promotion and tenure. Without the mentoring system in place, and particularly the presence of the mentor as a strong advocate, the protégé likely would have failed to receive tenure. This is an example where the mentoring system was successful for the protégé and certainly made a difference in the outcome of the tenure process. However, there has been no further professional interaction between the mentor and protégé.

Case Study 4 (male mentor/female protégé)

The assistant professor was assigned a mentor from a similar discipline who had been in the department for 22 years and had over 40 journal articles. The protégé had several years of experience in research, teaching, and service prior to joining NMSU. Thus, her assigned mentor assumed the role of advocate, supporter, and advisor in routine university matters, but did not collaborate on research articles. He did help her develop her teaching program and stressed the importance of demonstrating a strong commitment to teaching and to the students, particularly at the undergraduate level. This mentor/protégé pair had similar work ethics, priorities, and dispositions, which allowed them to work effectively together to advise students and share laboratory resources. The mentor had served previously, both successfully and unsuccessfully guiding his protégés through the tenure process.

The protégé's attitude and specific requests of the mentor were critical to receiving good advice from him. In addition, the protégé sought help, support, and counsel from colleagues across discipline and departmental lines. She found that other assistant professors were often a good source of information about equipment, funding opportunities, campus resources, and time-management strategies. Four assistant professors were brought into the department within two years, and although they were in different disciplines, they realized that they might help each other attain tenure by working together. Furthermore, college and university-wide activities brought all of the new assistant professors together and encouraged cooperation, support, and exchange of information. This type of peer mentoring is common in graduate school and should not be ignored once a university position is achieved. The tenure decision is imminent and looks promising.

Case Study 5 (male mentor/male protégé)

The protégé was a recent graduate and was assigned a faculty member that had been in the department nearly 20 years and had published 37

Table 1. Proposed guidelines for mentoring assistant professors.

The mentor should:	Examples, discussion, or considerations:
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.
Counsel the protégé on the types of documents and narratives required for the Promotion and Tenure package.	Two forms of teaching evaluation. The first (student evaluations) is typically provided by the department or college; the second (peer evaluation) 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. Supporting letters of appreciation from other faculty, public educators, local commodity groups, and Cooperative Extension Service faculty. A complete resume, in addition to the portfolio being developed. List of abstracts and papers presented (for assistant professors, as associate professors should have a well-developed portfolio without this 'padding'). Brief synopses of research activities.
Help find resources. Introduce people and organizations on campus and in the community.	Teaching improvement programs, such as Writing Across the Curriculum, Peer Coaching, or Educational Development seminars. Equipment and technical support around the department and campus. Funding sources (grant writing workshops, special research programs available only to their particular institution or discipline).
Assist in publication by suggesting ideas for research or collaboration.	Invite junior faculty to serve as co-investigators leading to coauthorship of journal articles. Encourage faculty to write about their teaching activities. If published in peer-reviewed journals these articles are counted toward 'research' activities in many institutions and allow a faculty member to 'double-dip' by getting research credit for their teaching activities.
Champion the protégé whenever possible.	Work with the department Awards Committee to nominate the protégé for college or university awards.
Guide the protégé away from counterproductive projects or individuals.	To decrease time delays and frustration, some activities, institutions, or people are best avoided at the beginning of a career, e.g., hidden agendas, unreliable or undependable performance, and animosity between various parties.
Offer to evaluate the annual performance document.	While not part of the duties of a mentor per se, much of the material in the annual performance document could find its way into the Promotion and Tenure document. The mentor could help avoid any overlooked activities.
Serve as advocate during negotiations with the administration.	If the mentor is assigned prior to hiring, they could help the new professor during negotiations for salary and start up package with college and university administration. Support the new professor during tenure and promotion evaluations.

journal articles. The protégé was hired before the mentoring program was initiated, and early on there was evidence of a lack of commitment to the teaching program. The mentor advised the protégé that good research productivity was insufficient to gain tenure in a department that had little duplication of effort in either the research or teaching arena. While some improvement in teaching was made, student complaints continued. In spite of having 13 journal publications, which demonstrated his research productivity, this faculty member failed to receive tenure, based on his lack of commitment to teaching.

The criticism of his teaching program came from both the mentor and promotion and tenure committee, thus the mentor did not serve as an advocate for his protégé and should probably have suggested a different mentor earlier in the process. A lack of administrative support, coupled with the initiation of the mentoring program midway through the tenure process of the individual may have contributed to the lack of fit in this example.

Lessons Learned From Case Studies

Universities, colleges, and even departments often have different criteria (written and unwritten) 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 component and provide sound professional advice to their protégés. These mentors may not necessarily provide the psychosocial needs, but that function usually cannot 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 little published evidence that even the professional (academic) mentoring is readily available in agricultural sciences. Much of the mentoring literature deals with facultystudent mentoring (Frierson, 1997 and 1998) with few references to faculty-faculty mentoring. The mentoring literature also deals with mentoring of women (Brennan, 2000; Garner, 1994) or minorities (Culotta, 1993; Tilman, 2001). However, many of the same pitfalls, concerns and questions face faculty regardless of gender, race or ethnicity.

Mentoring does guarantee the success of the protégé but success is multifaceted and depends on many variables (Hill et al., 1989). However, the case studies in the Agronomy and Horticulture Department show the value in human resources of having a mentoring program if the program is operated correctly. In recent history, the department notified three faculty members that they would likely not receive a favorable tenure decision. The denials (including the protégé in case study 5) were already in the pipeline when the mentoring program started. Five faculty members were hired after the mentoring program was initiated and all have received tenure. Consequently the mentoring program appears to work but additional activities could improve the program, particularly for associate professors trying to get promoted. Obviously, a mentoring program does not guarantee all protégés will be successful, as demonstrated by Case Study 5 which was a clear case of a poor fit into the department. Some people are better suited for jobs that are 100% research such as those in the USDA Agriculture Research Service or private industry, or 100% teaching.

A mentoring program may also be more successful in institutions with larger programs to better match personalities and disciplines, and which offer more flexibility if a change in mentors is needed. 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 typically only represented by one faculty. Thus, the choice of mentors is severely limited. Ours is a case where "the group as mentor" (Pierce, 1998) may be most advantageous. All senior faculty have to develop a mindset that it is their responsibility, and in their best interests, to help the newer faculty succeed. Parallel to that, the new professors must be receptive to advice and guidance if they really want to be integrated into their new academic environment.

When a person does not appear to be making satisfactory progress toward tenure, the department

Table 2. Potential topics for a mentoring workshop.

Topics	Examples
Formal guidelines of the mentoring program	Most advantageous roles for mentors
Potential pitfalls and how to avoid them	Use case studies for illustration
Responsibilities of mentor and protégé	Give and accept advice in a civil manner Formal and informal meetings Regularly scheduled sessions Research collaboration, if appropriate
Mentoring resources available	Internet, publications, on-campus help
Conflict resolution	Issues with students, peers, and employees
Timeline for tenure and promotion progress	Annual reviews, case studies
Documentation for promotion and tenure file	Letters of support, teaching evaluations, awards, and other documents
Time-management strategies	Balancing research, teaching, and service
Serving both professional development and psychosocial needs	Enhancing the social environment with informal meetings, retreats or field trips
Rewards for mentoring	Personal and departmental goals
Inequality of mentoring	Use of case studies and guidelines
Importance of attitude	By both the mentor and protégé
Encouraging associate professors to continue in the mentoring process	Changes in mentor/protégé relationship as it matures, continued need for support

head, along with the mentor, should constructively point out shortcomings and suggest avenues for improvement. 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 proposed guidelines in Table 1 may improve the quality of mentoring or at least provide a starting point for mentoring programs. Workshops could be conducted to teach mentoring skills. In fact, some universities have been willing to pay for pilot mentoring programs (Curtis, 2000). Topics to include in a mentoring workshop are suggested in Table 2.

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 person to satisfy all needs of the 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 mentoring committee may provide more effective guidance (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.

Summary

Mentoring can be beneficial to the protégé by assuring their 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, research interests are renewed, and new funding and technology become available. Obviously, the department benefits by enhanced stature and more productive faculty and should reward good mentoring.

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 must be established for the protégé to be assigned a new mentor if the system in not working without jeopardizing the tenure process for the protégé.

Literature Cited

Anon. 2000. The many faces of mentoring. College of Human Resources and Education Fall 2000 faculty meeting. http://www.chre/vt/edu/FacultyAssn/mentoring.notes.html. 6 p.

Brennan, M. 2000. Mentoring tenured women chemists. Chem. & Engin. News 78: 46-47.

Cochran, J.A. 2001. Confidentiality and university collaboration: keys to a successful entry-year teacher mentoring program. National Forum Jour. http://www.nationalforum.com/COCHRNaer10e3.html, 5 p.

College of Agriculture and Home Economics. 1996. Guidelines for Promotion and Tenure of Academic Programs and Agricultural Experiment Station Faculty. New Mexico State University, Las Cruces, NM, 18 p.

Culotta, E. 1993. Career choices: finding—and keeping—minority professors. Science 262: 1091-1092.

Curtis, C.W. 2000. Call for proposals: Faculty Mentoring Program. Memorandum. http://www.auburn.edu/research/vpr/mentoring/. 1 p.

Durrant, S.W. 1988. The myth of mentoring. ADFL Bull. 19(3): 42-44. http://www.ade.org/adfl/bulletin/V19N3/193042.htm.

Erickson, E.H. 1963. Childhood and Society. 2nd ed. New York: W.W. Norton.

Frierson, H. T. (ed). 1997. Diversity in higher education: Examining protégé-mentor experiences, Vol. I. Stamford, Ct: JAI Press, Inc.

Frierson, H. T. (ed). 1998. Diversity in higher education: Examining protégé-mentor experiences, Vol. II. Stamford, Ct: JAI Press, Inc.

Galbraith, M.W. and N.H. Cohen (eds.). 1995. New Strategies and Challenges. San Francisco: Jossey-Bass.

Garner, S.N. 1994. Mentoring lessons. Women's Studies Quarterly 22: 6-13.

Hill, S. E., M.H. Bahnuik, and J. Dobos. 1989. The impact of mentoring and collegial support on faculty success: an analysis of support behavior, information adequacy, and communication apprehension. Communication Education 38(1): 15-33.

Kram, K, E.1985. Phases of the mentoring relationship. Academy of Management Jour. 26: 608-625.

Kuyper-Rushing, L. 2001. A formal mentoring program in a university library: components of a successful experiment. Jour. Academic Librarianship 27: 440-446.

Lary, M.S. 1998. Mentoring: a gift for professional growth. The Southeastern Librarian 47: 23-26.

Levinson, D.J., C.N. Darrow, E.B. Klein, M.A. Levinson, and B. McKee.1978. The Seasons of a Man's Life. New York: Knopf.

Mullen, E.J. 1998. Vocational and psychosocial mentoring functions: identifying mentors who serve both. Hum. Res. Develop. Quarterly 9: 319-331.

Pierce, G. 1998. Developing new university faculty through mentoring. Jour. Humanistic Education and Development 37: 27-38.

Taylor, T.S. 2002. Many managers short on hiring skills. Business Outlook, Las Cruces SunNews. August 5, 2002, p. 16.

Tillman, L.C. 2001. Mentoring African American faculty in predominantly White institutions. Res. in Higher Education. 42: 295-325.

Wright, C.A. and S.D. Wright. 1987. Young Professionals. Family Relations. 36: 204-208.