NAVIGATING THE TENURE TRACK THROUGH EFFECTIVE COLLABORATION

Pamela R. McCauley-Bell, Ph.D.
Martin Luther King, Jr. Visiting Associate Professor
Department of Aeronautics and Astronautics
Massachusetts Institute of Technology
Cambridge, MA 02141

Lesia L. Crumpton-Young, Ph.D.
Associate Professor
Department of Industrial Engineering Department
Mississippi State University
Mississippi State, MS 39762

ABSTRACT

Often, it is very difficult for assistant professors to effectively marry their excessive work demands. Because these demands are not likely to diminish, effective approaches must be introduced to improve the likelihood for meeting these demands and receiving tenure. Often professors overlook the advantages of identifying someone to work within their academic environment. Through effective collaboration assistant professors will have the opportunity to develop alliances that create a synergistic work environment and reduce the individual demands placed on assistant professors. Guidelines on forming collaborative work relationships for teaching, research and service are discussed as well as suggestions for maintaining these collaborations.

Introduction

The goal of this paper is to provide assistant professors with suggestions for establishing collaborations that will assist them in attaining tenure. As assistant professors the work demands are excessive. In addition to the excessive demands, no guidelines are readily available for assistant professors in meeting these demands and generally very few mentors or senior faculty are available to provide direction. Guidance is needed to ensure that assistant professors adequately manage these various work demands while pursuing tenure and promotion. This concern of successfully earning tenure and promotion is shared by all assistant professors, but statistics demonstrate that this concern is greater for female faculty, particularly in engineering and the hard sciences. Generally in attaining tenure at a research-oriented institution, the three criteria are research, teaching and service. While no one chooses to assign priority weights to these categories it is widely accepted that research is the most significant issue while teaching is second (close or distant second, depending on the institution) and service is considered to be the third most important category.
Drs. McCauley-Bell and Crumpton-Young, recently tenured in their respective engineering departments, offer guidelines based on personal experience, fortuitous sampling and observation that may be useful to other assistant professors as they work to successfully manage the excessive work demands necessary to achieve tenure and promotion. Often, assistant professors feel that they must work alone and some prefer to work alone. Also, the assistant professor may feel that their colleagues are not interested in working with them. This paper encourages assistant professor to strongly pursue collaborative working relationships in the following areas:

- research: proposal development, experimentation and publication,
- teaching: course development, class preparation, and curriculum enhancement,
- service: professional duties and responsibilities and committee assignments.

Although some individual activities are necessary in the academic environment, collaborative working relationships are highly advantageous and valuable. However, it is very important to be selective when identifying persons to collaborate with. Some of the characteristics to look for in potential collaborators include:

- Someone who holds similar philosophies on work ethic;
- Someone who is interested in working on similar projects;
- Someone who has time to commit to a possible collaboration;
- A certain level of trust is necessary in collaborations, chose someone you feel you can build this trust with in your collaborative efforts;
- Ideally identify a person who you like to work with and who has similar expectations from the collaboration; and
- Someone with an area of expertise that complements your area of expertise.

**Why Collaborate?**

Collaborative working relationships offer an opportunity to capitalize on the strengths of the collaborators and provides the many benefits gained from using team approach. These collaborations are also an opportunity for an assistant professor to broaden their knowledge base and gain additional expertise in their research and teaching areas. This is especially beneficial when an assistant professor wants to embark upon a new or different research endeavor but is unsure about how to do so or the most significant issues facing this new and different area. In these cases, working with an industry partner or individual with expertise in the area may dramatically reduce the learning curve and more readily facilitate an environment to successfully conduct the research and publish results. Another benefit of collaboration includes improved likelihood of staying on schedule because of sharing work demands as a team. In addition, it is critical for the faculty member to understand the strength that they bring to the team and to be assertive in ensuring that their ideas and interests are preserved when working within a team.

**Research Collaboration**
In academic research collaborations the objectives are to develop high quality research endeavors, secure funding for research and produce scholarly publications. The ability to secure funding to conduct research will directly impact resources available to produce high quality research findings and publications. Collaborations in research endeavors are extremely beneficial when ones home institution does not have all of the needed resources and expertise to accomplish the desired project goals and objectives. Potential collaborators for research projects include: Departmental colleagues; College Colleagues; University colleagues; Remote Colleagues; Industrial Partnerships; and Research Laboratories. Although departmental collaboration opportunities are often scarce within small departments, this document would not be complete without encouraging assistant professors to look for opportunities to create synergy within their own departments. One approach to initiate this collaboration is to identify faculty with a research focus in an area of interests to you and determine what scholarly strengths you possess that may strengthen this research area. An understanding of what other faculty are working on can be gained by reviewing their publications, analyze their research laboratories and personal interaction. In addition, it is also advantageous to try to identify faculty members with excellent reputations and are well respected by the research community.

University Wide Collaborations
Recently, some federal funding agencies have been more interested in supporting multi-disciplinary research efforts. Although identifying colleagues outside of your department or college to collaborate with is often difficult, it can prove very beneficial. For example, the authors have both worked with individuals outside of their departments on projects that involved industrial and environmental engineering as well as industrial engineering and computer science. These are often the most fruitful collaborations due to the diversity of input from each participant. Finally, review faculty interests and identify individuals with common research pursuits that may serve as potential collaborators. After selecting the pool of potential collaborators initiate correspondence with each of them. The initial correspondence could include the following:

- Who you are (department, your general research focus)
- When you arrived at the University
- That you’ve identified some of their work that is of interest to you (mention publications, courses, etc.)
- Ask them if they are still actively working in this area
- Share your area of expertise or interest that can be useful in addressing this topic
- State that you are interested in collaboration from the standpoint of proposal development, publication, student advising
- Ask them if they have a few minutes to discuss the possibilities with you

It is important to remember that most faculty members are very busy and they may not respond to you immediately. Follow-up contact via telephone is encouraged. No
matter what the response (or lack there of) from the faculty member resist the urge to take it personally or give up searching for collaborators.

Remote Colleagues
The proliferation of resources and interconnectivity produced by the Internet has dramatically enhanced the opportunities for national and international collaborations. The same methodology listed for initiating contact with university-wide collaborators can be used with remote colleagues. However, caution must always be exercised in protecting one's ideas and this becomes even more significant when sharing your insights with individuals that you have no physical proximity to or means to evaluate integrity. Thus, it is advisable to not share all of the details of your suggestions but rather wait until the relationship begins to develop into the generation of proposals or publications. After a series of emails, it is often useful to schedule a conference call meeting. Also, if you attend the same academic conferences or meetings make plans to meet with the potential researcher. In fact, meeting at a conference is generally a more comfortable approach to initiate a relationship with a remote colleague because you have had opportunity to witness them presenting their work. The presentation will often give insights that a written document or website can not offer.

Publication Collaborations

Collaborative efforts can dramatically increase productivity in generating publications. Potential collaborators for assistant professors include: Ph.D. Advisor; Colleagues within your university; Mentor or Senior Faculty; Colleagues in other departments; Remote Colleagues; Assistant Professors.

Publication Collaboration Process
A process employed by the authors to produce publications includes a clear establishment of the objectives of the paper, identification of an appropriate journal, and coordination of the writing responsibilities. The most challenging aspect of producing a paper with collaborators is the delegation of the writing responsibilities. Generally someone is designated to “take the lead”. This individual will initiate the writing after all collaborators complete the outline of the paper. The following is a description of the stages undertaken in producing a high quality scholarly paper.

1. Decision is made to prepare a paper: This should be a goal that is of interest to all collaborators. The commitment of all collaborators should be obtained during this phase.
2. Development of outline: This is a group effort that can be accomplished generally by providing everyone with project information to date at least 48 hours in advance. Because the assistant professor usually stands to benefit the most from the productions of a publication, this person must prepare target areas within the project that you feel are publication worthy.
3. Conducting a 30 – 45 minute meeting (teleconferences work great). In this meeting discuss the topics that you have identified for inclusion in the paper. An outline for the contents of the paper should be produced.

4. Delegation of responsibilities: After the outline is complete, within the same meeting, it is advisable to select an individual to take the lead or serve as the designated point of contact (POC) for the article development and for the sections to be assigned to participants. Often this will be the assistant professor. It is also important to establish a schedule for completion of the sections and coordination of the additional publication responsibilities.

5. At the completion of the meeting the POC should prepare a brief summary of the meeting activities to be sent all to all participants. This summary should include: A running title of the article; Proposed journal that the article will be submitted to upon completion; Objective or aspect of the research in which the article will focus; The sections and assigned individuals for each article; and A tentative schedule for completion.

6. Bi-weekly reminders should be sent out to all participants by the point of contact.

7. The POC should be the person that coordinates the material so that all sections are cohesive and flow nicely together. Although the responsibilities were parsed, it is essential that the paper read as one fluid document.

8. After the first complete draft of the document is prepared, send a copy out to all participants and schedule another 15 – 20 minute teleconference to discuss the content and quality of the publication.

9. Make final modifications and mail the paper. All participants should receive an emailed copy of the document as it was sent, as well as, a hard copy. The hard copy should include a copy of the cover letter sent to the editor or the journal and an author’s page.

Teaching Collaborations

Many assistant professors are extremely conscientious when preparing for their first teaching assignments; thus, an exhorbent amount of effort is spent in preparing for courses. Therefore minimizing the time available for research endeavors. An approach to help minimize this difficulty is to collaborate with individuals in course preparations. This is not an area that people generally think about when collaborating, but working with a good collaborator can drastically enhance the quality of a course and improve the confidence level of the assistant professor. The benefits of collaborating when teaching include: Reduce preparation time; More comprehensive coverage of course material (i.e. identify issues associated with the course that you may not be aware of); and Increased confidence regarding the credibility of course material covered and knowledge level of material presented to students. These are clearly worthwhile motivations to establish collaboration for teaching. However, it is important to be willing and eager to share your course notes and information with those...
who collaborate with you. Some individuals to collaborate with in teaching include: Persons who previously taught similar classes at your university; identify a colleague at another university who has taught the similar course. Explain that you are teaching the course ask for suggestions: text, difficult topics to convey, supplemental text, and labs ask if they are willing to share notes; Contact author of text. Ask if additional course material is available that he/she might be willing to share; Ideally identify a colleague at another university (e.g. peer from graduate school) who is preparing to teach this course. The aforementioned information serves as a good starting point for assistant professors interested in working collaboratively on course development; however it is essential to review the course material received from collaborators in depth and personalize it. So make extensive efforts to add to the notes, enhance the material, add your own examples and case studies. In addition, if homework assignments, quizzes, and exams were prepared as a part of the course preparation, make sure to determine if all questions are relative to the manner in which you presented the material in class.

Service Collaborations

The service aspect of an assistant professors job often seems to be the most taxing and least rewarded during the tenure and promotion process. Therefore, it is imperative that assistant professors minimize their participation in service related activities. However, some service activity is necessary to become a well-rounded contributing faculty member. In the authors experiences the primary service activities include: Professional Society responsibilities; Committee service; Faculty advisor to undergraduate students; Faculty advisor to student organizations, particularly if you are one of four minorities or female faculty members in a technical area. In cases where you are required to do service activities, try to avoid being the chair of a committee but rather suggest co-chairing; serving as a co-chair will not necessitate your attendance at every meeting. This also reduces the responsibility by sharing the work and the accountability for a successful outcome to numerous committee members. Furthermore, co-chairing of a committee with an experienced faculty member can serve as a very good learning experience for an assistant professor member. This advice applies to leading student organizations as well.

Conclusion

This paper is designed to assist assistant professors in the development of collaborative work relationships that may provide a strong foundation for success in achieving tenure and promotion. The contents of this paper are based on the experiences of the authors; however, this is by no means a rigid formula for collaboration. In an effort to help others, the authors enthusiastically welcome input from other individuals on their experiences with establishing collaborations or the feasibility of using this approach to accomplish their academic goals.

CREATING A GLOBAL ENGINEERING COMMUNITY THROUGH PARTNERSHIPS
1998 WEPAN National Conference

22