

## **Guidance for New Faculty**

**R. J. Soukup**  
**Department of Electrical Engineering**  
**University of Nebraska-Lincoln**  
**Lincoln, NE 68588-0511**

### **Abstract**

This paper deals with advice for new engineering faculty members. It is the personal opinion of someone who has been a department chair for over 21 years. If you are at a public institution, your charter will be to assist the students in learning, perform research and other scholarly activities, and perform public service. If you are at a private institution the public service portion of the assignment may be quite different from that of a faculty member at a public institution. The things you must accomplish in order to succeed are those which bring positive attention to you and your department, college, and university. The thing you must not do is waste time, six years go by very fast.

### **Teaching**

Besides being a great lecturer or presenter of course material, there are many things you can do in order to become a first class teacher. The main task is to have a genuine interest in the students and in their welfare. You can show this in many ways, one of which will be to always welcome them to your office. You must make them feel welcome even when you are too busy to do so.

Volunteer to advise a student organization. If you do become an advisor be sure to attend all the meetings and functions they support, or at least all that you can. Make suggestions for their benefit, but try not to dictate or meddle.

Be innovative, find other methods than a lecture to use in the classroom. You are here at this meeting to learn what other people are doing, and I am sure that many ideas will be presented to you as you attend the various sessions. Use the ideas you acquire from this meeting in your classes this fall. Some will work and some will not. In order to determine which is which before it is too late, have a mid-term student evaluation of the class. There are other ways to learn about innovative teaching, the IEEE Transactions on Education is a very useful publication for electrical and computer engineering and may be of assistance to others. Many other discipline specific like journals and the ASEE Journal of Engineering Education for all disciplines merit reading by all engineering faculty members.

Do not make the course easy or give trivial exams in hope of getting better student evaluations

of teaching scores, this will always backfire. After reading several thousand student evaluations I am certain that the students know who the good teachers are and I recommend heeding their advice. One thing you can do to improve your evaluations is always arrive on time well prepared. Also, do not continue class beyond the fixed quitting time, except when absolutely necessary.

### **Research and Scholarly Activities**

In my opinion, scholarly activity is more important than generating a lot of money. Nevertheless, generating the money to support that research is very important. Learn all you can about where to secure money to support your research. In your proposals always include money to support graduate students, you are at an institution whose main purpose is to educate students. In the long run, this will be more important than summer salary if such a decision must be made. Do not give up after being turned down for the  $n^{\text{th}}$  consecutive time, ask a colleague for advice. Go to Washington to visit the funding agencies. Funding is more likely if the people with the money know who you are.

You may need to search for new areas to conduct research other than your dissertation work. After all, your advisor, who supported you, is now in competition for the same money if you continue to try to do the same work. He or she has more experience and is more likely to get the funding than you are. Team up with other faculty members, sole principal investigator grants are becoming more difficult to obtain as time goes on.

Your initial efforts should be to obtain money so that you can later, but not much later, publish the results of your research. Scholarly activities are a must, whether it is in research or teaching. These scholarly activities include publishing in refereed archival journals, the most important type of publishing; publishing in conference proceedings or presenting unpublished papers at conferences; applying for and receiving patents; and publishing textbooks, the most lucrative type of publishing, if you are lucky and good.

### **Service**

Even if you are at a private school you will be expected to contribute in the service area, although the essence may be different. I have never been on the faculty of a private school, but I assume that a lot of the internal workings are similar. The university, the engineering college, and the departments each have committees. Get on only those committees which interest you and for which you can do a good job.

Try to get on review panels for funding agencies and volunteer to review papers for journals. If you do not know how to go about this activity speak with your senior colleagues who do a lot of this type of service. They can help you get started, you continue by doing a good job. Anything you can do to bring positive recognition to you and your school is important.

Do not overextend yourself in service activities. They are usually weighted much less than teaching and research.

You must be able to accomplish multiple tasks concurrently. You cannot ignore scholarly activities and concentrate on teaching, and vice versa. You must try to excel in research while doing a great job teaching. Learn how to do both by budgeting your time wisely.

Time budgeting may be one of the more difficult things for a new faculty member to accomplish. Since there are definite differences between schools and even departments within schools, there is no universal time allotment for each activity. I suggest that you learn the norm, which is usually a range for each activity, for your department. This can be determined by reading all the appropriate internal documents, by discussion with other faculty members, and by discussions with the department head or chair.

Never make excuses, always be positive about your accomplishments.