

## **Service at a Research University: A Veteran Faculty Member's Perspective for New Engineering Faculty**

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### **Abstract**

Tenure in engineering programs at research universities usually is granted based on a faculty member's performance in teaching, research, and service. New untenured faculty hires at such institutions often have a reasonably good understanding of the teaching and research components of this trifecta, but have questions about the appropriate amount of service to perform. On the one hand, service can open up avenues to expand research activities and enhance teaching. On the other hand, service can also cause faculty to expend valuable and limited time on activities that will not be highly regarded by a tenure review committee. This can lead faculty members to question whether or not they should pursue particular service roles as they attempt to get their careers off to a successful start.

In this paper, the various types of service roles are summarized. The potential benefits offered by the different types of service are explored. Additionally, the potentially negative aspects of the different types of service are highlighted. The impacts of service on the career paths of faculty are discussed. With this information in hand, new faculty will be in a better position to wisely choose between the different available service opportunities as they seek to produce the best portfolio for both their immediate goal of achieving tenure and their longer-term goal of having the career that they desire for decades.

### **Introduction**

A goal, if not the primary goal, of most new engineering faculty members is to perform well enough in their jobs to earn tenure. Receiving a tenured appointment at a university not only provides a faculty member with job security and the freedom to explore new research and pedagogical ideas, but also is a tangible recognition of the quality and significance of his or her work. Receiving tenure validates the quality of the faculty member's work. While restrictions on tenure or elimination of tenure have been suggested in recent years,<sup>1-4</sup> tenure is likely to remain a key element of a faculty member's life for the foreseeable future.

At most institutions, tenure is granted following a satisfactory review of a faculty member's early career work as it relates to teaching, research, and service. Based on AAUP recommendations,<sup>5</sup> most probationary faculty will be evaluated for tenure in their 6<sup>th</sup> year of employment, with some being evaluated sooner if they believe that they have met the expectations for tenure early and others receiving tenure in a 7<sup>th</sup> year of employment. Individual institutions and programs will weigh a faculty member's activities in teaching, research, and service differently based upon the mission of that program and the needs of the program when a faculty member is hired. For example, a program whose primary mission is undergraduate education will usually consider the quality of a faculty member's teaching contributions paramount when determining if a tenured appointment is warranted. At a research university, while competency in teaching is still likely necessary for tenure, much of the focus of a tenure review committee is often placed on a candidate's research accomplishments, and advising of graduate students may be seen as a component of teaching.

But where does service fit in? If an institution considers community outreach an important part of its mission and expects all faculty to be heavily involved in such work, then it is rather clear that a faculty member's service activities will be a very important factor in a tenure decision. But most research institutions do not fit that description. A research institution might encourage some community outreach, but unless a faculty member is specifically hired to run (or help run) an outreach program, it is unlikely that a faculty member would be granted or denied tenure at a research institution based upon their community outreach activities. Even when considering all aspects of service, service activities might be a contributing factor but wouldn't likely be the sole reason for a tenure decision at a research university.

New engineering faculty at research universities are often faced with many demands on their time. Therefore, it is important for such faculty to prioritize the activities that they pursue, and allocate their time and effort accordingly. While it is clearly important that they be developing their research program (submitting grant proposals, advising students, writing papers on their successful research) and it is also necessary that they develop a solid teaching portfolio, how much time should be devoted to service? And for that spent time, what types of service activities are likely to be the most beneficial? The purpose of this paper is to provide guidance to new engineering faculty on these questions from the perspective of a veteran faculty member who has been heavily involved with service activities over the course of his career. In addition, some insights on how one's service may evolve over the course of a career will be provided.

The author has nearly 25 years of experience as an engineering faculty member at a research university, the University of Wisconsin-Milwaukee (UWM). While there have been some recent changes to the governance structure at UWM, the institution has a long history of active faculty governance of the institution. He has served on a plethora of department, college, and university-wide committees, including chairing the executive committee of the Faculty Senate at his institution for two years. He has served as the Secretary of his college's faculty for 17 years, and has chaired a dean search and screen committee. Currently he is the coordinator of UWM's Faculty Mentoring program. Professionally, outside of UWM, the author serves as an ABET program evaluator for ASME, and has had several division-level leadership positions in ASEE. This experience has placed him in a position to see many types of service activities, and to understand the benefits and potential downsides for untenured faculty of these activities.

### **General Types of Service Activities**

“Service” can be defined as “the occupation or function of serving”, with “the act of serving” defined as “a helpful act” or “useful labor that does not produce a tangible commodity”.<sup>6</sup> So, service activities can be thought of as activities that help others and may at the same time help the person performing the activity in some manner; however, the activities are generally seen as being altruistic. At times, additional compensation may be provided for service activities, but such compensation should generally not be expected to be significant. From the perspective of an engineering faculty member, service activities can be divided into three categories: university service, professional service, and community service. Some activities may be considered to fit into more than one category, but most are fairly clearly categorized.

### University Service:

University service includes all service activities that involve the operation of the program, school or college, or university as a whole. These include such things as participating in department meetings, representing a program or department in a college-wide committee, taking an active role in ABET accreditation activities, serving on a campus-wide governance committee (such as a Faculty Senate), working as a faculty advisor to a student organization, and running a curricular or extracurricular program. Truly administrative roles could also be viewed as university service, but are probably more appropriately thought of as complete jobs rather than an activity. The number of university service activities available for a faculty member to participate in depends considerably on the governance structure of the university. Schools with a top-down governance model may have relatively few committees on campus, while schools with a bottom-up governance model are likely to have a greater number of committees and opportunities for service.

### Professional Service:

Professional service activities generally look beyond the confines of a university to the engineering profession as a whole (or have a discipline-specific focus). The types of activities included in this category include serving as a reviewer for conference and journal papers and grant proposals, serving as a journal editor or assistant editor, organizing conferences, serving as an officer in a professional organization (including local chapter officers and division officers), being a ABET program evaluator, and serving on committees of professional societies.

### Community Service:

Community service includes activities that reach out primarily to the local community surrounding the university, but can encompass a broader audience as well. The local university is a place where many people in a community turn to when they are seeking expertise to address a problem. Community service activities include outreach to local K-12 schools to enhance STEM programs or to serve as judges for school competitions, presenting talks to community groups on a subject in the faculty's expertise, performing pro bono consulting work for individuals or small companies, serving as an expert source for local media outlets, and volunteering for charitable organizations in the community. While this last example may not seem to be part of someone's job as a faculty member, such volunteer service can enhance the image of the university by having those not connected to the school see someone who works at the school helping out the community.

## **Potential Benefits and Detriments of Different Types of Service**

While one can argue that all service is good, for untenured engineering faculty members one does need to recognize that all service activities take time. For those faculty members for whom little weight may be given to service activities as they are evaluated for tenure, spending too much time on service activities that provide little personal benefit has to be a concern. As far as the detriments of service go, the main detriment of performing service is the loss of time for other activities. Additionally, in some cases not performing a particular service activity may be

detrimental to one's career. Moving beyond the idea that performing service takes time, below I offer thoughts on which types of service can be particularly beneficial to a new engineering faculty member's career, and which may be harmful to a career if they are not done.

### University Service:

University service activities generally fall into one of two categories: (1) activities needed to be done to keep the department/college/university functioning and (2) activities designed to improve the student experience. Clearly, both of these categories are important in their own ways. With regards to the first category, it is likely that someone on campus will be agreeable to serving on a committee or to performing some non-committee service to maintain operations, so a new untenured faculty member should not feel that they must do this type of activity (e.g., serve on a university-wide committee) because they fear that the university or program will shut down if they do not serve. Therefore, while it is beneficial to keep the university or program functioning, it isn't likely to solely depend on a particular untenured faculty member to keep the university open. But other benefits do exist for an untenured faculty member to serve on a department/college/university committee or to take on some non-committee task. The two major benefits to this type of service are (1) it increases the visibility of the faculty member on campus and (2) it allows the faculty member to meet others outside of their department (for non-departmental committees) which could lead to unexpected collaborations. These are both benefits that stem from networking: this type of service will allow you to network with others on the campus which can provide you with more "allies" as you work on developing your career. A third benefit is that such service allows a new faculty member to learn more about how the university functions, which can make it easier for someone to know how to get things done or alternatively what can't be done. For someone contemplating this type of service, one thing that needs to be considered is the amount of time needed to be spent on a particular committee. Some committees have very small time commitments while others can be very demanding. A new faculty member can ask senior faculty members about what are the likely time commitments for a particular committee before seeking to join it.

Service work devoted to enhancing the student experience may often not be as visible to others on campus, but has its own benefits. This type of work (for example, being a faculty advisor to a student organization) can put you into close contact with students interested in the same types of things that interest the faculty member. It can be personally rewarding to see students develop knowledge in that area, and perhaps head off on a career related to the student organization's work. It can also potentially be a recruiting tool to attract strong undergraduate students to work with the faculty member on research. One issue that can exist at larger research universities is that faculty have fewer opportunities to closely connect with undergraduate students, and so this type of service does allow a faculty member a better opportunity to know the students than simply teaching a large class.

With regards to university service, there are some activities that should be done, as not doing them may be detrimental to their career. An untenured faculty member should attend and participate in department meetings. If the college which houses the department also has faculty meetings where attendance is expected, those should be attended as well. Furthermore, as will be discussed later, an untenured faculty member should not say "no" to every request by a

department chair/head or dean to do something; however, a faculty member should not think that “yes” must be the answer every time. Always refusing to do some service task will likely not be appreciated.

### Professional Service:

Professional service activities can potentially have a large positive impact on an untenured faculty member’s career development. These activities bring a faculty member into contact with the larger engineering community, allowing him or her to build a strong reputation outside their university. As most schools require an external evaluation of a faculty member’s tenure portfolio as part of the review process, greater visibility of one’s work is beneficial. The primary benefits of professional service are (1) increased knowledge of current work in a particular research or teaching area, (2) increased external visibility of the faculty member’s work, and (3) opening up potential collaborations with others from outside the home university that can lead to greater funding opportunities through collaborative proposals. For an untenured faculty member at a research university, these all may lead to the benefit of improving one’s own research productivity. For example, if an untenured faculty member reviews grant proposals for a federal agency, that person can see examples of what makes a good proposal and what should be avoided when writing proposals. This can increase the likelihood of writing a successful proposal in the future. If someone volunteers to organize a conference session, it provides an excuse for that person to contact prominent researchers in that area and to strike up conversations with those researchers. In general, professional service activities are beneficial to untenured faculty in that they help with career development – provided that the faculty member sets a limit as to how much work they take on. Organizing a conference session might be reasonable, but volunteering to organize an entire conference might be too time-consuming.

### Community Service:

Most community service activities tend to be one-time activities which require a fairly small amount of time, and therefore should probably be viewed with less concern over becoming a major absorber of time. But unless the program’s mission involves significant community outreach, the benefits of community service may also be smaller or at least less tangible to the faculty member. The primary benefit to the faculty member of most profession-related community service is increased visibility of the individual, program, and university. One never knows where such increased visibility may lead, and so what might seem as a relatively minor activity on the part of the faculty member may reap large rewards in the future. For example, someone who gives a talk on engineering at a local high school may inspire a student to study engineering at their university and that student may want to work on a research project in the future with the faculty member who gave the talk. Answering a local reporter’s questions on an engineering topic for 5 minutes may result in some business leader contacting the faculty member with a request for help that leads to a funded research project. While most of these “low-level” community service activities won’t reap such direct benefits for the faculty member, they do help educate the public at large and require relatively little effort by the faculty member.

Larger scale community service, such as organizing a coding club for high school students, or providing technical assistance to a local school team engaged in an engineering competition are

more likely to have a greater impact on all those involved, and therefore might be more likely to lead to long-term benefits for the faculty member. However, such activities can take significant amounts of time, and may not be highly regarded by a tenure-review committee. Therefore, it may be better to delay participation in such activities until after receiving tenure.

### **Recommendations on Early Career Service**

As discussed, new, untenured engineering faculty members at research institutions need to determine how to best balance their time between teaching, research, and service. In most cases, service contributions will be of less concern for a tenure review committee than research and teaching accomplishments. As large time commitments are the primary detriment to performing service, an untenured faculty member needs to weigh the potential career benefits versus the time spent on a service activity. With these thoughts in mind, the following recommendations are offered for consideration.

1) Pay close attention to the guidance given you by the person or people designated to provide you with input on your progress towards tenure. This guidance may come from a specific department mentor, a department chair/head, a tenure review committee, or other concerned senior faculty members. If you receive conflicting advice, seek guidance from the tenure review committee who will eventually consider your case. The reason for heeding this guidance is that it addresses your particular situation and environment. For example, if you were hired by a research university with the expectation that your scholarly work will come out of your work on community outreach programs, it would clearly be important to follow along that track.

In the absence or paucity of definitive advice from your institution, consider the following.

2) With regards to university service, first and foremost fulfill your department and college meeting obligations. I then recommend looking at serving on one or two low-time commitment college-wide or university-wide committees beginning in the middle of your probationary period. Such service demonstrates a willingness to contribute to the operations of the broader college and university and begins to bring you in contact with others at your institution – without becoming a major consumer of your time.

3) Be careful of being asked to do “too many” service activities by your program. It is not uncommon for a department to slowly assign relatively low-effort tasks to new faculty. While you should agree to do some of these in order to help the department and to show that you are trying to be a team-player, some departments begin to overload junior faculty with these small tasks. Sometimes this occurs because the department truly wants you to feel like a productive, contributing member of the department who is helping to keep the program flourishing. Sometimes it is done to deepen your commitment to the institution. Other times, it occurs because nobody else wants to do the tasks, and it is thought that a junior faculty member will be unwilling to refuse the request. If you feel that you are being asked to do too many of these tasks, discuss the situation with your department chair/head, and come to an agreement on a limited number of departmental service activities that you will do.

4) Because of its potential to help a new faculty member's research activities, it is recommended that you become active in professional service. While you do need to set some reasonable limits (for example, you may not want to volunteer to organize an entire conference or review 20 journal articles a year while untenured), seeking out professional service activities can provide short-term benefits to your professional portfolio that will be recognized and appreciated by a tenure review committee.

5) Minimal effort community service activities should almost always be done if for no other reason than they provide you with a change from your normal routine and can be refreshing. The primary caveat with this is that you want to be certain that the organization or individual asking for your help will not cause you problems down the road as a result of their other activities. More substantial (in terms of time commitment) activities should probably be delayed until you are at least near the end of your probationary period (and have a strong portfolio in terms of research and teaching) or until after you receive tenure; however, you may still want to consider beginning to help a more senior faculty member with an established program if it is of long-term interest to you.

6) Be involved with service activities that are of great interest to you, even if they do not help you receive tenure. While new faculty members don't always remember this perspective, receiving tenure is not the most important thing in a person's life. Receiving tenure in a job that you find isn't as appealing to you as you thought it would be is not worth bypassing following a passion that brings greater happiness and self-satisfaction.

A last recommendation is specifically addressed to faculty from groups that are traditionally underrepresented in engineering. Faculty in such groups tend to be looked to for service that is seen as benefitting those groups, such as being the faculty advisor to a student organization centered on an underrepresented group or to serve on a committee tasked with finding ways to increase diversity. My advice here is to do what you are comfortable with doing, and for which you feel you have adequate time to devote to the work. If you are questioned about not doing something you are asked to do, you can point out that you are not yet tenured and that you need to spend your time focusing on things that will be viewed as most important by the tenure review committee. If you are interested in serving in this role in the future, you can indicate that as well.

### **Long-Term Career Impacts of Service**

After receiving tenure, it is often expected that a research-university's faculty member's service activities will increase. Presumably, having a well-developed research program and teaching experience frees up a faculty member to devote more time to service. Depending on the amount and type of service that a faculty member pursues as their career progresses, the career path of the faculty member can be impacted.

Expansion of one's professional service activities after receiving tenure will offer the potential of becoming a more prominent and successful researcher. Such increased activities will bring more recognition, and with more recognition often comes more opportunities for research. Therefore, if you wish to continue to grow your research program, you should continue to try to become more engaged in professional service. Alternatively, expanding into more activities that are



education-related (such as becoming an ABET program evaluator or becoming an active officer in an ASEE Division) can foster development as a master teacher or engineering education expert.

After receiving tenure, you should definitely consider becoming more active in university service roles (including serving on committees whose work is more time-intensive), as this gives back to the university and helps to continue its operations. If you are interested in working in more administrative roles at your institution, then increasing your university service activities even further provides you with more experience in understanding how the university works. This makes you a more attractive candidate for administrative positions.

As far as community service, the analysis and advice already provided continue to hold true post-tenure. However, if you are truly interested in expanding outreach to the community, the greater freedom often available to tenured faculty provides you with the time to restructure your career activities to meet these goals. Additionally, long-term community service activities can open up the possibility of serving on more local commissions or boards that would allow you to do more to shape the future of the community.

## Summary

This paper has attempted to provide untenured engineering faculty with some analysis of the various types of service activities that are available to them as they progress through their careers. Advice on these service activities has been provided primarily with an eye towards untenured engineering faculty at research universities as they attempt to navigate their probationary appointment with the goal of receiving tenure. This paper represents the views of one veteran faculty member who has been heavily engaged in service, and others may have differing views. Therefore, it is most important to remember that untenured faculty members should listen to the advice they are being given by their program as they make choices in how much service they will do prior to receiving tenure. After receiving tenure, faculty are encouraged to spend more of their time helping their institution, profession, or community as they best see fit.

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