AC 2010-574: AN EXPLORATION OF P&T POLICIES RELATED TO THE SCHOLARSHIP OF ENGAGEMENT AND OUTREACH AT E&T PROGRAMS WITHIN THE US

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An Exploration of Promotion and Tenure Policies Related to the Scholarship of Engagement and Outreach at Engineering and Technology Programs within the US

Abstract

This paper describes research identifying how the scholarship of outreach, engagement, and service-learning (SOES-I) is recognized in promotion and tenure (P&T) decisions within the disciplines of engineering and technology (E&T). The research seeks to identify both the frequency and extent of how these forms of scholarship are used in P&T considerations at universities and colleges within the US. Social science models of SOES-I do not seem to fit professional disciplines such as E&T. For E&T programs, the SOES-I is of necessity focused on faculty's interaction with industry as well as traditional community partners needing a technology centric consult. Student involvement comes in the form of projects, either episodic or continuous with both communities. Currently, the axis of control for faculty reward systems are operationalized by the values placed on:

- 1. refereed journal publications
- 2. funded projects and grants that pay the federal overhead rate
- 3. outside evaluation of performance by respected academic peers.

These traditional values have limited use of current trends in faculty leadership in SOES-1). What is needed is a new recognition of the scholarship of engineering that contrasts and values faculty's progressive proficiency levels and progressive skill-sets of professional performance in advancing the practice of engineering as compared to scientific research in engineering theory.

Introduction

According to Keating, et al.¹, social science models of engagement and outreach do not fit professional disciplines such as engineering and technology robustly. For engineering and technology programs, the scholarship of engagement and outreach is of necessity focused on faculty's interaction with industry as well as traditional community partners needing a technology centric consult. Student involvement comes in the form of projects, either episodic or continuous with both communities. Byrne² finds that "Undergraduate student participation in faculty scholarship activities can result in significant contributions and advancement of both fundamental knowledge and product development." Keating et al.¹, describes the present time as a time to "...extend university education beyond the imparting of knowledge to include the development of innate human potential for creativity, innovation, and leadership in engineering." This is labeled as the scholarship of engineering. This definition applies the SOES-1 to industry consults by E&T faculty as a process of professional performance.

Currently, the axis of control for faculty reward systems are operationalized by the values placed on¹:

- 1. refereed journal publications
- 2. funded projects and grants that pay the federal overhead rate
- 3. outside evaluation of performance by respected academic peers.

Although he does not distinguish between research and teaching based universities, Keating et al.¹, rather boldly state that what is needed is a new recognition of the scholarship of engineering that contrasts and values faculty's progressive proficiency levels and progressive skill-sets of professional performance in advancing the practice of engineering as compared to scientific research in engineering theory. Barker³ expands this line of reasoning in examining civic engagement as scholarship and not charity work. For Barker³, collaboration with the public, whether the government, non-profit or an industry is scholarly practice that "fulfills traditional academic functions.

This type of scholarship is widely established within the scholarship of other professional disciplines such as the medical education where clinic work is considered vital to the educational process and vital to the university mission. Small and Uttal⁴ recognize the extension of this kind of scholarship to liberal arts programs where social problems are studied and solutions are proposed that lead to change within communities and partnership of all statures. This is called action-oriented research. The purpose of action-oriented research is to "generate knowledge that can be used to address practical concerns of local communities, organizations, and groups and incorporate local understandings of specific practices and issues." When relating this to the engineering discipline as regard to engineering education, action-oriented research has been labeled the scholarship of engineering.

There is an old saw that the only person who likes change is a baby. The US Attorney General has opined similarly that no crisis should be wasted in commenting on politically motivated change. Similarly it appears from lean literature⁵ that management only comes to realize that change is needed is when the company is in dire straits. There appears to be great satisfaction among (E&T) academicians that the status quo of teaching, research and service is achieving all required purposes⁷ while simultaneously lamenting indicators that STEM education in America is in decline, enrollment of females and minorities is lagging and other nations are creating engineering professionals at rates this country experienced prior to the availabilities of federal grant monies. Kerr⁷ labeled this phenomena "...the folly of rewarding A while hoping for B".

There is a call for changes in P&T processes among some members of the engineering profession. Part of that call recognizes involving communities with scholarship in the form of engagement and outreach. Key to this scholarship is art and science of dissemination. Heretofore, only discipline related PhDs were deemed qualified to perform "peer reviews". Unfortunately, that process will, too often, exclude end users of action-oriented, scholarship of engineering end users. The call is to include a broader range of media and recipients of the results of research whether basic, applied, engaged or a product of outreach. Other disciplines might call this advertising. Advertising seems to have established a role in retaining customers and subscribers and perhaps could be useful in attracting students if presented at the right level. When scholarships readership is increased, recognition, acceptance and involvement would seem to be also increased. Sandman, Lorilee and Weerts⁶ call for a broader dissemination of results and an involvement of community partners in assessing its worth. It would appear that a product that remains unknown to a broad audience, has little value outside it's "prestige" audience.

As Kerr⁷ points out, what is valued must be rewarded. Byrne² echoes a similar theme when considering the role of EOS-1 in scholarly activities. He points out the need to reward faculty for

bringing the real world of industry into the academic environment—beyond professional consultation—by rewarding and recognizing the scholarship of engineering in P&T processes. For Byrne², this is "a non-traditional form of scholarship that has significant value in the engineering education environment, and can be recognized in the faculty reward system." Depew, et al.⁸, recognize this as a need for faculty performance appraisals that "...create and deliver courses...advance the practice of engineering through meaningful creative scholarship... and to engage in creative scholarship that advances the practice of engineering for creative technology development and innovation."

East Carolina University is part of the state of North Carolina's university system. The system has initiated a strategic plan for "...scholarly public service on each campus..." within the university system. Part of that strategic plan includes development of a "more balanced incentive and reward structure for University faculty that appropriately values achievements in teaching, research and scholarship, and public service." Development of this reward system results from a directive for the university system to "...lead the campuses in a refinement and adjustment of the tenure promotion, and incentive system to place greater value on the faculty involvement and engagement in applied research and outreach that will enhance the state's competitiveness without decreasing support for teaching, basic research and scholarship."

Background

Community Engagement is an active partnership between communities of Eastern North Carolina and East Carolina University to develop, exchange, and apply knowledge, information, expertise, and resources for everyone's benefit. These resources include, but are not limited to faculty, staff, and students. The elective Community Engagement Classification offered by the Carnegie Foundation offers East Carolina University the opportunity to be recognized for engagement within various communities. According to the Foundation, "Community engagement describes the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity." East Carolina University has established the following working definitions of the components of their Community Engagement efforts:

- **Community engagement** is a reciprocal partnership between a university and a community(ies) established to respond to issues and opportunities in a mutually beneficial way.
- **A community** is any group of people connected over time by common interests. Communities may or may not be bound by place.
- **Service-learning** is a method of instruction that has the benefit of meeting academic course objectives and helping students develop a sense of engagement and social responsibility. All volunteer hours and service hours are not service learning. Service learning courses should meet the following broad guidelines:
 - 1. Service learning is structured within a course and has a formal, academic curriculum that is rooted in the discipline in which the course if being offered;

- 2. The course contains a set of organized community-based learning activities through which students directly service a constituency as a means to address an identified community need;
- 3. The course provides structured opportunities for students to formally connect their service activities to the course curriculum and to broader social issues through reflective methods.
- Faculty scholarship associated with curricular engagement is scholarly activity that faculty produce in connection with their service learning or community-based courses or internships. The scholarship products are professional presentations and publications along with curriculum development, assessment of student learning in community, action research conducted in a course that are disseminated by means of reports, curriculum materials, and/or faculty development workshops,.
- Faculty scholarship associated with outreach and partnerships is scholarly activity that faculty produce in connection with their partnership development and participation or their outreach activities. The scholarship products are professional presentations and publications along with research studies of partnerships, documentation of community response to outreach programs, and other forms of assessment that have been disseminated by means of reports and policies.

East Carolina University has established an Engagement, Outreach Scholars Academy as one part of its broader plan for complying with the system's strategic plan. The academy was started in 2009 with tenure-track representatives from each of the colleges of the East Carolina University with the expressed purpose of encouraging EOS-1 throughout the university by training individuals to establish research agendas centered on EOS-1. These charter scholars were brought together during the spring of 2009 in an intensive semester long indoctrination on the scholarship of engagement and outreach within the university and within the university system. The scholars identified individual scholarship projects that were directed at or about the scholarship of engagement and outreach as part of their academy program of study.

During the inaugural class of the academy, scholars were made aware of the weakness of supporting systems and structures within the faculty procedures and policies that would support engagement and outreach. However, the university, in response to the North Carolina University system initiative has developed faculty senate committees to address reward and recognition policies for encouraging faculty participation in EOS-l pedagogies and research agendas. While much has been written about the need for increased support, apparently less has been done to evaluate what is being done within institutions of higher learning to support engagement and outreach by faculty. From this realization, a project was initiated with the author as a member of the first academy to identify what other universities may be doing to support engagement and outreach.

As a member of the College of LMNOP and a charter member of the North Carolina University's Engagement and Outreach Scholars Academy, in which both technology and engineering departments reside, the author chose a project on the scholarship of engagement and outreach as part of the academy. Specifically, the project of interest was an examination of the

existing level of support for engagement and outreach within the college as compared with peer programs and universities. The College of LMNOP contains four departments with independent promotion, and tenure committees. The recognition of university, college and department goals relative to outreach and service learning through P&T is not documented formally and the level of integration within P&T considerations is unknown. Additionally, a systematic approach to linking University objectives such as Carnegie Community Engagement Classification does not exist within the College of LMNOP which is assumed typical of most universities and colleges. While academic freedom is highly valued, a linkage to broad-based, university-level leadership objectives is also complimentary and important in maintaining a university teaching, research, and service agenda. When reward and recognition systems do not reflect university, college or department goals, discord and floundering can result. Again, Kerr⁷ is recalled. The College of LMNOP's leadership recognized this issue, and based on a desire to establish the College of LMNOP as a leader in engagement, outreach and service-learning desired to establish a baseline of the various P&T practices within the College of LMNOP, determine how other E&T programs throughout the country are addressing SOES-1 and build a collaborative-based approach for building a uni-diversity model recognizing the SOES-1 in P&T practices, procedures and policies.

At East Carolina University, the difference between engineering and technology programs is colloquially referred to as "calculus". From a broader perspective, and more related to promotion and tenure processes, Rose¹¹ reports that engineering and technology programs differ in their requirements for promotion and tenure. Where engineering relies primarily on published referred articles describing research activities, engineering technology recognizes papers or presentations given at technical or instructional conferences and applied research.

In consultation with the College of LMNOP Dean, a research methodology was developed to address the desire for leadership in EOS-l among the East Carolina University's colleges and schools.

Methodology

In order to capture the information required by the college, a methods panel was established. Tenured faculty from the college were invited to form a panel with the purpose of creating a framework for research leading to an understanding of the role of P&T processes in promoting and recognizing the scholarship of OES-l. As a result of this meeting, a survey was developed, reviewed by the panel and vetted within the college by tenure and tenure track faculty using SurveyMonkey and unique collectors for each group. The method for the research is quasi-experimental using survey data collection methods. The research methodology is subject to social acceptance bias on an institutional basis at least, personal basis at most.

Data collection began in July, 2009. The survey consisted of three parts, demographics, data collection relative to engineering and technology and data collection relative OES-l, the latter being reported here. The OES-l data was collected using twelve open-ended questions. During the creation and vetting process, it was recognized that this form of survey would limit participation.

Following data collection within the college, links to the survey were emailed to engineering and engineering technology peer groups. Two peer groups were surveyed using unique collectors within the SurveyMonkey website. One peer group represented the college focusing specifically on engineering and technology programs and the other peer group represented peer institutions of East Carolina University. The invitation was also extended to members of the ETD List_serve directly using an additional collector within SurveyMonkey.

A fifth collector was established with SurveyMonkey to collect the data from ASEE members. Links to the collector were sent to all ASEE division chairs requesting their assistance in inviting division members to participate in the survey. Data was received from 172 campuses of higher learning with 309 participants. From the participants, between 50 and 100 provided data associated with this research effort depending on the particular question. Participants were cautioned in the invitation to participate, and within the survey, that the data collection process was involved. Still the minimal response rate for the involved section was 16% of all participants. No record of how many divisions invited members to participate was collected.

While the research data was collected from E&T faculty and staffs, it is expected that these programs and their purpose for employing the scholarship of outreach, engagement and service-learning in their pedagogy are not unique to the associated disciplines. It is also expected that the interest in how these forms of scholarship should and do impact P&T considerations are not E&T specific. It is expected that future research could verify these assumptions and subsequently demonstrate generalizability/transferability of the results. However, it was recognized that E&T programs lag other programs within universities and colleges of employing EOS-l pedagologically.

Respondents indicated they had held their current position/rank for a mean length of 6.8 yrs (SD 6.8), had been at their current institution for a mean length of 11.9 (9.4) yrs and in their current unit for a mean length of 10.9 (9.0) yrs. Mean age for all respondents was 47.4 (10.8) years. Seventy-five percent of respondents were males; 90% of respondents held a doctorate or PhD; 62% held tenure with their institution.

Results

On the question of what is the relationship between P&T processes and the institution's mission, 4% of respondents indicated no importance, 13% indicated the relationship would be nice to have, 15% indicated the relationship was strongly encouraged and 37% acknowledged that tying P&T to the institution's mission was absolutely required; the remainder were non-responders. Similarly, 64% of respondents reported that referred journal publications were absolutely required as part of their P&T dossier with 62% evenly distributed between absolutely required and strongly encouraged relative to the importance of publications in proceedings.

For the twelve questions inquiring how universities relate OES-l to P&T processes, 51 of 311 respondents submitted responses. Due to these questions being open-ended, and requiring more time to thoughtfully provide data, the low response rate was expected. The questions asked reflected the concerns of the initial methods committee and are presented below by the question. Response provided are typical responses and have been edited for grammar and spelling and are

meant to convey the tenor of respondents. Additional answers, some redundant, some not useful for the purposes of this report, and some directed at improving the data collection method, were not included.

How does your institution determine the effectiveness of OES-l for the stakeholders (community partner, university, faculty) relative to P&T?

Fifty-one participants responded to this question. Of those respondents, 25% either did not know how effectiveness was determined and 25% indicated the question was not applicable indicating their institution did not support OES-l as part of P&T processes. Of the remainder, 33% indicated that effectiveness was not determined or was poorly assessed as part of their institutions P&T process. Seven percent of respondents indicated that effectiveness of OES-l is considered during P&T considerations. The results indicate that few institutions represented by respondents have formalized process outside the established system of annual performance reviews. Table 1 provides individual responses that can be summarized as methods include, annual peer reviews, for OES-l grants, the rubrics associated with the grant approval, student surveys and partner surveys.

Table 1: Stakeholder Effectiveness Responses.

- Annual documentation by faculty and peer and supervisor evaluation.
- Did you work on a project developed by an administrator? Full credit. Did you come up with a better project supported by the community? No credit, no support, no acknowledgement.
- If you work through grants, there are assessment rubrics within the grants, and this then gives everyone feedback as to the efficacy of their efforts. These rubrics are not institution-wide, they are on a case by case basis. Nevertheless, rubrics exist to measure efficacy, which are readily shared.
- In connection with experiential learning, we now survey students and partners for outcomes.
- Involvement is all that is necessary.
- No formal monitoring. Only measurement of effectiveness would be meeting the goals and objectives

How does your institution monitor the effectiveness of the P&T process when OES-l is included?

Fifty participants responded to the question on P&T process effectiveness when OES-l is included. Twenty-eight percent indicated that they did not know how the institution monitored P&T process effectiveness when the process included OES-l, 26% indicated the question did apply to their institutions P&T process, 26% indicated that no monitoring occurred. Feedback to the question is provided in Table 2. Respondents indicated a propensity for university P&T processes to be primarily based on external funding and therefore only externally funded OES-l was considered meaningful for P&T effectiveness and that subjective process of effectiveness were the norm when procedures were not in place. Additionally, it appears that OES-l is not

always appreciated in P&T considerations; it may be the exception in engineering related institutions represented in the survey.

Table 2. Institutional monitoring of OES-1 effectiveness as part of the P&T process.

- Big research grants trump anything else. It is given lip service (but they scramble to find honest activities to put in their annual report related to OES-l) and since I don't have a PhD, nothing that I do will ever make the grade.
- It seems that this survey must have been written for non-research universities? Or less-research than mine?
- Monitor? Who decides if a process is effective? It's all quite subjective.
- Monitored the same as any other "scholarship" area. Would be counted as "service" if there is no external funding to support it, or if there were no peer-reviewed journal publications arising from the activities of OES-L.
- P&T Committees do not typically consider OES-I in the tenure process unless it results in publications and/or funded research which then are considered on their own merit regardless of the source or seed of the original effort. Other than that, OES-I is typically considered a service activity (or even lower on the continuum as a paid consultancy), with little to no relevance in the P&T decision process.
- There are established procedure at each unit to monitor the process.
- There is no policy; it is an activity that is strongly discouraged.
- Through committees.

If your community provides reports on the OES-l activities in which faculty are engaged, how are these reports factored into your institution's P&T process?

Fifty- four participants responded to this question in some form. Twenty percent indicated they did not know how OES-L community partner reports might be factored into P&T processes; 30% indicated the question was not applicable; and 26% indicated no community reports are factored into P&T processes. Table 3 shows additional responses relative to community input. Table 3 might be summarized as no special or weighted consideration is given to community reports; at best, community reports are treated equally as other service inputs to the P&T portfolio process.

Table 3. Impact of Community Reports on the P&T Process

- Any good news that enhances the reputation of the faculty member is positive towards P&T.
- As elements in the portfolio.
- As factor in the Service area.
- Coverage in the media might be reported in the application.
- I think they would be part of the faculty member's tenure application dossier.
- No community reports or data compilation that I am aware of. Faculty are encouraged to document "service" activities in the community by submitting activity summaries for student newspaper or various university newsletters as "events." These newsletter items can be included in the written P & T file to show involvement and engagement beyond teaching.

- Not weighed heavily.
- Service credit is given. Not enough for tenure or promotion without highly rated teaching and research.
- The report could be considered.
- They would typically be weighed the same as letters of recommendation from unsolicited individuals. These reports would typically be considered "nice to have" but nothing more or less. They would not typically sway a P&T committee member toward (or away from) a candidate's achievements, because external letters from "close personal/business contacts" (i.e. friends in the system) would typically be perceived as inputs from people who do not understand the scope or structure of the academic tenure process.

When implementing OES-l as part of P&T considerations, how is accountability maintained between the community, discipline, and institution?

Fifty-one respondents provided responses to the question. Twenty-five did not know how accountability is maintained between the constituent groups; 24% indicated the question was not applicable to their situation; and, 31% indicated accountability is not maintained between the three constituent groups. Table 4 shows comments received from respondents in the form of answers to the question. The intent of this question from the methods panel was to assess how the veracity of the P&T process could be maintained should OES-1 be included. By implication, OES-1 was believed to be a source of potential contamination for the P&T process by the methods panel. In summarizing the responses in Table 4, accountability seems to rely on established/accepted systems associated with P&T processes not considering OES-1, i.e., grant procedures, performance appraisals, publications, and/or networking/favoritism. There appears to be no OES-1 efficacy-based accountability within institutions factoring OES-1 into P&T considerations represented in the survey.

Table 4. P&T Process Accountability Maintenance when OES-1 is considered.

- Accountability can be insured by working through our STEM Center or through a number of institutional initiatives which allow for collaboration across campus.
- Accountability is through the fulfillment of activities as outlined in the original proposal
 that was funded, and as shown by research publications on the same. If not for a funded
 project or reporting mechanism, most of the OES-L activities would be counted as
 "service" rather than "scholarship" for P & T purposes. There is little or no
 accountability or decision reached on the success or failure of "service" activities.
- Accountability would have to be performance and output based. The outputs would include items such as: publications in archival journals, generation of trademarks, patents, and/or copyrights, invited presentations to discipline-specific industry/trade conferences, and generation of funded activities, including scholarships, tuition remission programs, faculty buy-out, equipment purchases, maintenance offsets, and related issues.
- Again I think for research and scholarship efforts it requires funding, publications, and graduate student production, where those students have also published their work.
- It is such a trivial part of the equation that it is meaningless. Do something in that arena or suck up to the administrators and you will survive the process.

- It's not, really. Our OES-L work is highly interdisciplinary, with more social science than engineering.
- OES-1 is based on accountability to institution mostly.
- Personal ethics of the people involved.
- Probably is not specifically addressed. We are likely to believe the person in what they say their accomplishments are.
- Projects by faculty and their students.
- The students are considered the community, so faculty ratings are considered from courses taught.

How does OES-l as part of a P&T process influence recruitment and retention of faculty, particularly females and minorities?

Fifty-five respondents provided input to this question. Twenty-four percent indicated they did not know how OES-l as part of the P&T process influenced recruiting; 11% indicated the question was not applicable to their institutions; and, 45% indicated little or no impact. For the remainder of respondents there was strongly worded text indicating resentment, lack of sensitivity and/or loss of patience with the institution as well as support for OES-l as a recruitment incentive. Table 5 shows responses from participants. The reader is cautioned that the responses shown are taken directly from the survey and do not necessarily reflect the author's point of view. In summary, OES-l, where supported by inclusion in P&T processes and institutional goals, appears to be considered a positive factor in the recruitment of minority and female faculty. Please note the portions of responses in Table 5 were redacted to protect the anonymity of responses.

Table 5: Influence of OES-1 on Recruiting.

- I suppose they tell them to not do this sort of thing.
- It does not female and minority candidates get precedence because of their status qualifications are secondary at best.
- It doesn't. [redacted] has a hard time recruiting good faculty because its processes are outdated and the lower level administration doesn't adhere to them anyway. I am here as a mission for the [redacted]. I was not recruited and I would not work for [redacted] if given the choice. The other female (ethnicity redacted) faculty in the [redacted] department is here because this was where her husband could get a job.
- It has made a positive impact in demonstrating the culture of the university to prospective faculty.
- It hurts it. We've lost faculty.
- Minority and female engineering faculty are sought highly for all sorts of outreach type programs, and it hinders their ability to conduct research while junior faculty. They are advised to go easy on the community stuff while still untenured, and after they're tenured, they can serve on every diversity committee on campus.
- Faculty are generally recruited to fill university teaching needs, and what they decide to pursue as research or scholarship is a secondary consideration. An area of scholarship successfully carried out as represented by funding or publications is needed to successfully achieve tenure.

- OES-I was disregarded when I was recruited (I'm a female and minority). I was told research is 50% and teaching is 50% of my responsibilities.
- OES-l can be used to provide value-added opportunities for faculty, including females and/or minorities, but the primary concern would be in setting up false expectations in newly hired faculty who do not understand the final objectives and outcomes of the P&T process. By providing new faculty members with OES-l opportunities that are "outside of the academic mainstream" compared to the traditional P&T process—without ALSO mentoring them so they know about and understand the need to address the core function of the P&T process (Teaching, Creative Activities, & Service) —then they may be moving along an inappropriate career trajectory, leading to disappointment, failure, and possible law suits as a result.
- Retention is much influenced by the OES-l as a part of P&T process.
- In recent years, I can cite two minority faculty who were the first in their department who did not receive promotion to full professor because the OES-I which they were told would count did not. I also know of one school at my institution that cannot keep women faculty they are not given the tools to succeed. [redacted]. This action overrides the words that are tritely spoken.
- Some faculty come to [institution redacted], or stay at [institution redacted], particularly to participate in OES-L. This is especially true of women, in my experience.
- Somewhat attractive as there is no research agenda. However, staying too long can stagnate a person's career, as there is no reward for research or publication. Everything is inside the college.

Beyond the procedures, what is the undocumented process(es) for making it (not) work?

Members of the methods panel were very concerned about formalized procedures and unformalized/unwritten rules/procedures that may be at work in considering OES-l contributions within the P&T process. This question was designed to collect meaningful data that would address those concerns. Thirty-three percent indicated they did not know what undocumented processes might influence the use of OES-l as part of the P&T process; 18% indicated the question was not applicable to their institutions; and, 18% indicated little or no impact; and 33% indicated they did not know. For respondents at institutions where an AAUP contract is in force, responses were included under with the category, little or no impact. Table 6 shows additional responses. Respondents indicated a mixed bag of support and lack of support as well as disincentives formulate unwritten procedures.

Table 6. Influence of Unwritten Rules on the P&T Process Relative to OES-1.

- Active discouragement by dean.
- Administration says do what you can.
- Faculty are encouraged to participate in such activities, but this is more based on faculty member interest. This activity can be noted on our annual activity reports, although as mentioned before this is likely not weighted nearly to the level of more 'standard' rubrics for P&T.
- I have invited our administrators down to see the program that [redacted] funded for 10 years. But they never showed because it is not their idea.

- It is college/school specific.
- It would be up to the individual to clearly demonstrate it.
- Management can overcome faculty decisions in some cases.
- Our procedures are undocumented. Service and Scholarly work can mingle in community projects.
- Our undocumented process appears to be the Dean forcing the chair to say something to the faculty in faculty meeting. Then, those faculty who actually have information about what the Dean was talking about having coffee and "hallway conversations" with the other faculty. In about six months, the chair tells us about his "great idea" in faculty meeting as though it was originally his. Pounding the stuffing out of untenured faculty who do it. Discouraging senior faculty.
- OES-L has to fit into a framework that does not explicitly address it.
- There are several encouragement programs in the university.
- Yearly meetings of my committee give me feedback on my tenure process, and they provide a written summation of the direction they see my tenure dossier going in versus where they think it might be directed. There were also two oral presentations for strategic planning where I obtained feedback initially.

How long has OES-l been a part of your institution's P&T considerations?

Sixty-seven participants responded to this question in some fashion. Twenty-two percent indicated they did not know; 9% indicated the question was not applicable to their institutions; and, and 33% indicated never. Figure 1 shows the distribution of periods OES-l has been part of the P&T process for 16% of respondents indicating a reference-able length of time.

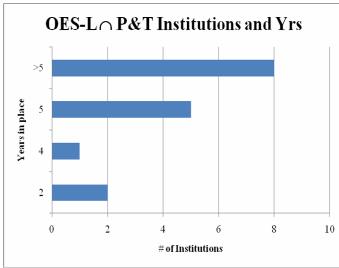


Figure 1. Graph showing relationship of institutions and years OES-1 included in P&T considerations.

What does "peer review" mean in the context of OES-l related publications for your institution's P&T process?

The methods panel had strong concern about the role of peer reviews as relates to OES-l publications and P&T processes feeling that publications in non-research oriented publications would dilute the efficacy of the P&T process were peer review process relaxed relative to researched based publications. As such, the panel desired information relative to the role and definition of peer reviews for OES-l publications. Sixty-eight

participants responded to this question in some fashion. Thirteen percent indicated they did not know; 15% indicated the question was not applicable to their institutions/situations; 4% indicated no definition existed; and, 35% indicated some sort of peer review process that might be blind,

journal related, conference proceedings, most of which are related to the "quality" of the journal/conference. Table 7 shows definitions provided by respondents that do not fall cleanly in one of the above categories. The definitions reflect concepts of peer review that address publications as well as the review of portfolios of tenure/promotion candidates.

Table 7: OES-1 Related Definitions of Peer Review.

- In the school level, the committee of faculty in similar areas will review 5 relevant papers provided by person under consideration. They read and reach conclusions based on their knowledge of the subject matter. This information is also sent to 5 people outside the Institute who do likewise. For all above committees, they do not read these, but look only at the bottom line numbers. Quantity is the only metric, not quality. In fact, when quantity is a bit low, they do not care that the quality is high. This was evidenced in at least two recent professor promotions one person had lots of papers, but external reviews on quality were very poor. Another [redacted] faculty had fewer papers, but the quality was judged to be very high. Only the "quantity" professor was promoted in spite of the reviews describing the quality of the work as not what is expected at the full professor level.
- [redacted]. Peers mean nothing in our system. Quality is measured by dollars.
- Left to discretion of the committees.
- OES-I publications are discounted and treated separately from technical publications.
- Peer review has no special context with respect to OES-I. It is simply applied across the board with respect to refereed publications and conference proceedings. It is a yes or no tick box.
- Peer Review in our institution is only by senior faculty at other institutions of published work.
- Peer review means anonymous review of your work by peers, with potential rejection by your peers. I would discourage my peers from writing papers focusing on outreach activities, if it means not writing a paper on their primary subject.
- Peer review means having someone who has achieved both professional AND academic credentials equal to or higher than those of the individuals involved in the P&T process. These "Peer Reviewers" serve as "Quality Assurance Evaluators" to insure the standards of the discipline and the academic community are being sustained. By having individuals who are neither professionally and/or academically qualified to serve in a Peer Review process, we would begin to see that the quality of the program(s) and the academic faculty (over time) would become "watered-down" and "ineffective". Furthermore, it would provide our true academic peers with an opportunity to ridicule and denigrate a system that uses outside "experts" as a key component of our assessment process.
- Peers within the College. No impact is expected beyond the college.
- Reviewed by other faculty as part of a formal decision-making process.
- Something that is examined by professionals prior to presentation/dissemination.

What voice is given to the impacted OES-l "community" in your institution's P&T process?

Sixty-five participants responded to this question in some fashion. Eighteen percent indicated they did not know; 1% indicated the question was not applicable to their institutions/situations; 37% indicated no voice was given to the OES-I community in the P&T process; and, 18% reported minimal or "lip service". While 1% or respondents recognized that letters of recommendation were additive, the value added was minimal compared to published works. One respondent reported that community voice was the most important contribution to their P&T process.

How does OES-l as part of the P&T process facilitate a viable research agenda for (junior) faculty?

Sixty-four participants responded to this question in some fashion. Fourteen percent indicated they did not know; 15% indicated the question was not applicable to their institutions/situations; 37% indicated that OES-l has no role in the research agenda of faculty with two additional respondents indicating that OES-l would be a negative influence on P&T considerations. Thirteen percent of respondents reported that OES-l would be valuable only as it aided and abetted grant awards and research related publications. Other responses are shown in Table 8. These "other" responses reflect general support for OES-l within a research agenda and supports development of ancillary resources and skills.

Table 8. OES-l as Part of a Research Agenda.

- Activity is required, but only a few choose research.
- I think that through service you make contacts that can help get research activities going. Many of my colleagues just submit grants.
- It motivates and guides a faculty to systematically develop the research agenda based on his/her OES-1 process towards tenure.
- OES-I is not distinctly defined as a part of the P&T process, except as a means to achieve the objectives agreed to under one or more of the three categories of: Teaching, Research (Creative Activities) and/or Service. In that regard, it can be considered a "tool" or a "vehicle" that a faculty member could employ to generate the desired research-centered product(s) that would then be evaluated as part of their P&T productivity mix. The mere fact that a faculty member had participated in (or originated) OES-I activities during their probationary period should not (and likely would not) be considered a success factor in achieving tenure at most four-year universities in the United States.
- Our previous dean told junior faculty to not spend too much time on our NSF implementation grant that involved engaged scholarship, education research and other aspects because it would interfere with their "real" research.
- Outreach and engagement can involve pedagogical research, which is expected in addition to engineering research. This is not written but verbally communicated, and is generally a department level expectation rather than college level. Nevertheless, a lot of outreach research funding drives faculty.

- Startup funds are provided for new faculty to establish research labs. They are encouraged to use their research labs for outreach activities.
- The ability to communicate and connect research to the community helps a junior faculty member to delineate the importance of their research.

Please describe the implementation methods for including OES-l in your institution's P&T process.

Sixty-four participants responded to this question in some fashion. Fourteen percent indicated they did not know; 13% indicated the question was not applicable to their institutions/situations; 25% indicated that no implementation methods existed for including OES-l has in P&T considerations. Twenty-five percent of respondents referred to unit code policies and procedures describing implementing methods and 8% reflected that implementation was only considered in the context of the service portion of the traditional evaluation triangle. Table 9 shows additional comments from respondents. Indications are that implementation follows traditional P&T considerations and that OES-l is implemented for the P&T process only as it augments research, service, teaching and leads to funding and publication.

Table 9. OES-I Implementation within the P&T Process.

- I was on the advisory board for our office that dealt with engaged scholarship, SL etc. We tried to get this incorporated but thus far it has met with considerable resistance in Engineering and other units.
- It is too new on our campus to evaluate. As far as I know this has not been tested in the P&T process.
- OES-I would fall under all three categories. Receiving funding to support this area would count towards scholarship, as well as the resulting publications. Refereed journal publications are more valued then conference publications. It does not matter what area the journal is in, for example; A publication in a referred journal on service learning would have the same value as an article published in the Journal of Fluid Mechanics.

Please briefly describe any rubrics your institution might use for considering EOS-l in the P&T process, i.e., what deliverables or metrics are required of faculty who might wish to have their EOS-l efforts considered towards P&T?

Ninety participants responded to this question in some fashion. Ten percent indicated they did not know; 3% indicated the question was not applicable to their institutions/situations; 29% indicated that rubrics did not exist for considering OES-l in P&T considerations at their institutions. At least four respondents indicated that including OES-l would be a negative if included in their P&T dossier. Of those describing rubrics, the rubrics themselves reflected teaching, research, and service with the implication being that OES-l would only be valued added if it provided additional materials related to funding and/or publications; about 29%. Table 10 shows comments of note that respondents supplied to the question that are representative of all respondent input and reflect the data provided above.

Table 10. Sample responses relative to rubrics that would be used for considering EOS-l in P&T considerations.

- Actually, they should not include it, or they should hide it. It would be frowned upon if an assistant professor 'wasted their time' on such things. Publications and dollars are what count. If one wanted to include this, their publication record must be very strong (stronger than someone that did not include it). You might say that administration is hostile to the idea (though at times they say nice things about the concept).
- As far as I know, OES-I is not considered at all significantly in P&T decisions at my university. Being Carl Sagan appearing on the Johnny Carson show will get you nowhere. Being Carl Sagan with \$2 million in annual external funding means you're golden.
- EOS-I does not have its own rubrics, and is not currently considered as a requirement. Faculty can choose to take it on as an overload, but research and teaching are much more important.
- OES-l is publicly espoused, but is wholly irrelevant to P&T. As a mid-range research school, our entire thrust is to develop as a research institution. \$\$\$ and pubs are essentially the only factors that are critical.
- In Engineering, these types of things all fall under either education or service, and are not considered toward P&T. Even receiving a large NSF grant to implement service-learning within the curricula was discounted.
- In the departmental tenure and promotion guidelines, the weight given to the evaluation of OES-1 activities is 10%. Examples given as such activities are: participation in University, state and national service activities; participation in activities or ASCE and/or Chi Epsilon student chapters; and registration as professional engineer. In the university's tenure and promotion guidelines, the description of OES activities is more broad, encompassing many disciplines.
- Many of our faculty advise OES-L project work. This is considered favorably as part of the teaching duties of the faculty member.
- Our commitment to service is negotiated each year with the department chair as a percentage of our effort. We are encouraged to keep this at 5% on record, though the actual time to do these activities at the level required for tenure is far beyond 5%. We are verbally encouraged to have service to all of department, college, university and professional organizations, with emphasis on department. Doing any one of these in a meaningful manner means more than 5% of time. Consider this university level definition. Service/Outreach.-.Service/outreach encompasses a faculty member's activities in one of three areas: outreach or public service, University service, and professional service. a. The outreach or public service function is the University's outreach to the community and society, with major emphasis on the application of knowledge for the solution of societal problems. Outreach primarily involves sharing professional expertise and should directly support the goals and mission of the University. A vital component of the University's mission, public service must be performed at the same high levels of quality that characterize the teaching and research/scholarship/creative activities missions. b. University service refers to work other than teaching and research/scholarship/ creative activities done at the department/unit, college, or University level. A certain amount of such service is

expected of every faculty member. University service includes, but is not limited to, serving on departmental/unit, college and University committees. Some faculty members may accept more extensive citizenship functions, such as a leadership role in the Faculty Senate, membership on a specially appointed task force, service as advisor to a University-wide student organization, and membership on a University search committee. c. Professional service refers to the work done for organizations related to one's discipline or to the teaching profession generally. Service to the profession includes association leadership, journal editorships, article and grant proposal review, guest lecturing on other campuses, and other appropriate activities. While it is difficult to define the exact nature of significant professional service, more is required than organizational membership and attendance. Examples of significant service would be that done by an officer of a professional organization or a member of the editorial staff of a journal.

- Service learning has been embraced by social sciences in our university, but very little inroads are evident in engineering. Outreach to the industrial constituency of our region is a strong factor in undergraduate education, but is [a] not seen by engineering faculty as service learning, but rather as opportunity for practical application of learned engineering skills and [b] not formally recognized as 'scholarship' in the PT&E sense. Thus, a good project with an industrial partner will be visible in a PT&E evaluation only for the external funding involved, or on the rare occasions when a journal article results.
- This is being examined as we try to establish how to evaluate these contributions.

Policies/Procedures

Many respondents provided copies or links to university policies or unit code procedures for describing EOS-l and its use in P&T considerations. Excerpts from this material from nine universities are included in the Appendix. Additionally, policies and procedures from non-engineering/technology programs were reviewed in preparing this paper; however, these have not been included here. In summary, there are common themes among these documents some of which have in place since the early 1990s. Those themes include:

- OES-1 is used in P&T considerations at major universities across the country as represented in the survey responses, the contents of the Appendix and other nonengineering programs.
- OES-l at those institution can be generalized as a contribution to the public welfare or common good and not solely focused on basic and applied research; utilization of faculty professional expertise, i.e., engineering faculty practice engineering solving problems in, with or for a community; and, the activities of OES-l are directly addressing or responding to real world problems, issues and concerns, i.e., applying professional knowledge to practical problems that leads to implementing meaningful resolution by the partnering of faculty and community.
- Compensation is not a factor in accepting the OES-1 activity as part of the P&T process unless the compensation exceeds some subjective level or standard.
- The concept of community is left general. Any constituency owning a problem requiring faculty professional expertise is an acceptable community as long as the community and the problem are consistent with the mission, goals and objectives of the institution. The

- focus should be on responding to social, economic environmental and educational problems of a region, a state or a broader set of constituencies.
- OES-I should always result in some conclusion that is shared via some media. The P&T process as demonstrated in the documents reviewed are very liberal in their description of reporting recognizing that a practical solution shared to masses may have more value to the university that narrow research that nudges the body of knowledge for a limited number of academicians. It is the impact on individuals that is important for OES-I and sharing between communities leverages the universities reputation far beyond a narrow band of discipline specific conferees. The idea is that OES-I "research" should be made understandable and useable in applied settings. Creative dissemination seems to be expected.
- With the above themes in mind, the expectation remains that OES-I represents scholarly
 activities that should be undertaken with plans, executed with integrity and completed
 with the dignity expected of faculty while impacting others beyond the partner
 community.

Conclusions

The collected data provide evidence that traditional systems of evaluating faculty P&T dossiers are in place. There appears to be modest movement in some programs to provide encouragement, recognition and reward for contemporary processes encouraging OES-l among faculty among several of the 172 institutions from which data was reported. A longitudinal study may be in order to trend the influences of calls for greater acceptance of OES-l in reward and recognition processes.

Bibliography

- Keating, D. A., T. G. Stanford, J. W. Bardo, D. D. Dunlap, D. R. Depew, G. R Bertoline, M. J. Dyrenfurth, A. L. McHenry, P. Y. Lee, E. M. Deloatch, S. J. Tricamo, H. J. Palmer (2005). An Emerging Template for Professional y Oriented Faculty Reward Systems that Supports Professional Scholarship, Teaching, and Creative Engagement in Engineering Practice for the Development and Innovation of Technology, 2005 American Society of Engineering Education Annual Conference & Exposition, Portland OR.
- 2. Byrne, Christopher, (2007). Student Engagement and Faculty Scholarship, *Proceedings of the 2007 American Society of Engineering Education Annual Conference & Exposition*, Honolulu, HI.
- 3. Barker, Derek (2004). The Scholarship of Engagement: A Taxonomy of Five Emerging Practices, *Journal of Higher Education Outreach and Engagement*, v9n2, p123
- 4. Small, Stephen A. and Lynet Uttal (2005). Action-Oriented Research: Strategies for Engaged Scholarship, *Journal of Marriage and Family*, v67n4, p 936.
- 5. Womack, James P. and Daniel T. Jones (2003). *Lean Thinking*, 2nd Edition, Free Press, New York, NY.
- 6. Sandman, Lorilee R. and David J. Weerts (2006). Engagement in Higher Education: Building a Federation for Action, A Wingspread Report.
- 7. Kerr, Steven (1975). On the Folly of Rewarding A, While Hoping for B in L. E. Boone and D. D. Bowen (eds.), *The Great Writings in Management and Organizational Behavior*, New York, NY, p297-351.
- 8. Depew, Dennis, Gary Bertoline, Mark Schuver, Donal Keating, Thomas Stanford, Duane Dunlap (2007). Faculty Reward System Reform for Advancement of Professional Engineering Education for Innovation: Revisiting the Urgency for Reform, Proceedings of the 2007 American Society of Engineering Education Annual Conference & Exposition, Honolulu, HI
- 9. U of North Carolina Tomorrow Commission Final Report, December 2007.

- 10. http://www.carnegiefoundation.org/newsroom/press-releases/carnegie-and-nerche-announce-partnership, downloaded January 8, 2009.
- 11. Rose, Andrew T., (2001). Consulting and Industrial Experience as Related to Promotion and Tenure of Engineering Technology Faculty, *Proceedings of the 2001 American Society of Engineering Education Annual Conference & Exposition*, Albuquerque, NM.

Appendix

University of Illinois Urbana Champagne Draft 4-5-93

- ...public service activities share the following three distinguishing characteristics:
 - (a) Contribute to the public welfare or the common good signifies the importance of determining the purpose of a particular activity. Doing so can help avoid confusing public service activities which are for the common good and those which are primarily of only personal interest and benefit.
 - (b) Utilize faculty member's academic and/or professional expertise emphasizes the importance of differentiating volunteer community activities such as that of the chemistry professor coaching youth league softball from those activities that call upon the professional expertise of the chemistry professor.
 - (c) Directly address or respond to real-world problems, issues, interests or concerns. Reflects a weighting toward applied activities rather than theoretical ones on the perceived continuum between theory and practice. Public service activities tend to focus primarily on the concrete rather than on the abstract.

Forms of public service

- Provide services for the public through a University clinic, hospital or laboratory
- Make research understandable and usable in specific professional and applied setting such as in technology transfer activities
- Provide public policy analysis for local, state, national, or international governmental agencies.
- Test concepts/processes in real-world situations
- Act as an expert witness
- Give presentations or performance for the public
- Provide extension education
- Conduct applied research
- Evaluate programs, policies or personnel for agencies
- Engage in informational activities (seminars, conferences, institutes) which address public interest problems, issues and concerns and are aimed at general audiences or specialized audiences such as commodity, trade, practitioner or occupational groups.
- Participate in governmental meetings or on Federal review panels
- Engage in economic and community development activities
- Participate in collaborative endeavors with schools, industry, or civic agencies.
- Testify before legislative or congressional committees
- Consult with town, city or county governments; schools, museums, parks, and other public institutions; companies, groups; or individuals
- Assist neighborhood organizations
- Conduct studies problems brought to one's attention by individuals, agencies, or businesses.
- Write for popular and non-academic publications, including newsletters and magazines directed to agencies, professionals, or other specialized audiences

Such activities usually require: (1) a background of significant scholarship; (2) adequate diagnostic skills; (3) utilization of or development of creative and focused methodologies; (4) strong information organization and media skills and/or (5) written and oral skills in interpreting as well as presenting information.

- ...Location...is not a distinguishing characteristic of public service.
- ...Whether or not compensation is received for public service is not a criterion for an activity being considered public service.

...activities directed primarily at a regularly enrolled students would not normally be considered public service.

Clinical teaching is clearly a blend of teaching and public service.

Not all forms of service are public service.

Not all activities engaged in by faculty members in settings external to the university are undertaken to help fulfill the university's or unit's public service mission. ...such service is sometimes referred to as private service. ...public service activities fulfill one's unit's and/or institution's mission and utilize one's academic and/or professional expertise.

Consulting with private companies can be an important form of public service and interaction with companies can contribute to one's research (scholarship) and/or teaching. ...it should conform to all three of the above criteria of public service and reflect the department's and/or university's mission objectives. ...purpose should be service rather than financial remuneration.

Public service is a complex set of activities reflecting the nature of faculty members' appointments, their training and experience as well as the specific external need.

As public service activities are planned, conducted and evaluated, consider how those activities might best be interpreted to promotion or tenure committees. Developing high-quality public service activities takes time and effort. Thoughtful evaluation and reporting of evaluation results also require time and effort.

Lowell Benson Community Service Center at the University of Utah, 1993-1997

Criteria for evaluating a faculty member's S-l teaching contribution:

- Service learning interactions are carried out in partnership with the community being served.
- The faculty ,member demonstrates that his/her students have provided a needed service to members of the community at large, rather than an exclusionary group
- S-l methodology used provides a way for students to process and synthesize the impact of S-l experiences on their understanding of the subject matter of the class
- The faculty member demonstrates that he/she has broadened students understanding of civic involvement, even though students may also focus on career preparation
- The faculty member acts as role model for students and other faculty, especially in developing the student's understanding of the importance of community involvement

University of Memphis, January 31, 1995

The scholarship of application adds to existing knowledge in the process of applying intellectual expertise to the solution of practical problems, and it results in a written product that is shared with other people in discipline or field of study. ...written products open to peer review;...development of content based seminars and workshops; ...provision of technical assistance; ...evaluation of public and private sector institutions, processes, and policies.

The scholarship of integration makes meaningful connections between previously unrelated topics, facts, or observations. ... Evidence in this area includes publications and presentations in a suitable forum.

Outreach refers primarily to sharing professional expertise with parties outside the University but, under very rare circumstances, may include non-professionally related activities outside the University.

Middle Tennessee State University, August 1, 1996

Performance Criteria for Tenure

...(3) public service...to the community as defined by the university's role and mission

Specific evaluation of criteria shall include the following:

- (1) An appraisal of faculty members' ability, resourcefulness and creativity, and an assessment of the results of their work. ...benefits or savings to clientele; ratings of work output; success; tasks completed; and the origination of new public service programs that have been seen through to successful completion.
- (2) An evaluation of faculty members' effectiveness, as judged by their impact on individuals, groups, or organizations served. ...indices of the success of the service in terms of improvement of communities, programs, operating agencies, production processes, or management practices. ...indications of client satisfaction with the service provided by the person, and of the magnitude and complexity of his or her work.
- (3) An appraisal of faculty members' local, regional and national stature. ...every opportunity to project their accomplishments among peers on a local, regional and national basis. ...in the form of direct consultations, planning reports, ...instructional time directed largely to the recipients of university-service programs. ...unique techniques developed to motivate clients, or new approaches to the transfer and application of knowledge, would be of interest to peers in other public service programs across the nation
- (4) Seeking internal and external funding for public service and professional activities; funded grants from MTSU, public agencies, or private foundations; submitted proposals for external funding by public agencies or private foundations.

University of Wisconsin - Madison

...The freedom of all faculty members to engage in all forms of scholarship at various times in their careers or in response to changing societal needs, makes the faculty member's powerful contributors to the development of knowledge and to the application of knowledge for the edification of society.

...Much outreach activity will, therefore, be focused on responding to the social, economic, environmental and educational problems of Wisconsin. ...outcomes of outreach activities should serve the common good on a state, national and international basis.

Evaluation of outreach scholarship should be conducted without regard to the source of funding for salary, but with the agreed upon responsibilities of the faculty member given the mission of the department, and the excellence with which those responsibilities are carried out.

Outreach research

- a. ...solution of practical problems of individuals, groups or societies
- b. Application of such research for the common good
- c. Formulation of public policy alternatives
- d. Presentation of artistic/creative work
- e. Communication of knowledge to lay audiences and professionals
- f. Interdisciplinary integration of previous research findings which creates new knowledge or perspectives

Evidence

- a. Publications and presentations including those for practitioners and the public
- b. Internal and external review of research process, outcomes and impact.
- c. Approval of research proposal for external funding
- d. Awards, honors, citations for creative works, applied research.
- e. Evidence of impact on scholarship and practice of field
- f. Evidence of impact on public/private policy makers

Outreach teaching

- a. Continuing education conferences, short courses, seminars, workshops, targeted briefings
- b. Distance education ...programs to increase public understanding and appreciation
- c. Organization development

d. Publications conveying knowledge to practitioners and the public.

Outreach service

- a. Advisory or consultative assistance
- b. Membership on public committees, boards, agencies, organizations
- c. Professional assistance to targeted minority groups.
- d. Sustained expert testimony to policy bodies
- e. Service to non-scholarly audiences that is consistent with the mission of the department

Evidence

- a. Reports of benefits to recipients
- b. Evidence of change in public policy
- c. Reports, evaluations of service

<u>Indiana University – Purdue University Indianapolis, August 15, 1996</u>

Professional service is the application by faculty members (including those with clinical ranks) and librarians of knowledge, skills, or expertise developed within their discipline or profession as scholar, teacher, administrator, or practitioner

...four types of professional service

- (1) Service to students
- (2) Service to the institution
- (3) Service to the discipline or profession, and
- (4) Service to the community

Service to the community involves activities that contribute to the public welfare beyond the university community and call upon the faculty member's or librarian's expertise as scholar, teacher, administrator, or practitioner.

- Providing services to the public through a university clinic, hospital, or center.
- Making research understandable and useable in specific professional and applied settings such as technology transfer activities.
- Providing public policy analysis for local, state, national, or international government agencies
- Testing concepts and processes in real-world situations
- Acting as an expert witness
- Giving presentations or performances for the public
- Providing extension education
- Evaluating programs, policies, or personnel for agencies
- Engaging in seminars and conferences that address public-interest problems, issues, and concerns that are aimed at either general or specialized audiences such as trade, commodity, practitioner, or occupational groups.
- Participating in governmental meetings or on federal review panels
- Engaging in economic or community development activities
- Participating in collaborative endeavors with schools, industry, or civic agencies
- Testifying before legislative or congressional committees
- Assisting neighborhood organizations
- Communicating in popular and non-academic publications including newsletters, radio, television, and magazines.

Criteria for evaluating professional services

- (1) Impact impact on identified recipients; contributes to professional development
- (2) Intellectual work results in the conceptual and practical advancement of constituencies served, including those in the university or the community. ...characterized by: a) command of relevant knowledge, skills, and technological expertise; b) integration of ideas, methodologies or solutions

- to solve problems; c) imagination, creativity, and innovation, and; d) awareness and application of ethical standards
- (3) Sustaining contributions and leadership regular and progressively more complex service activities, may involve intense involvement for a focused time; frequent invitations to serve on committees, task forces, or special assignments evidence that the faculty member's...peers...value that person's participation on service tasks; may often volunteer to serve on committees, task forces, or special assignments, indicating a willingness to contribute to the work of the unit
- (4) Communication and dissemination interpret and communicate their professional service to multiple audiences. Creative dissemination may include multiple and diverse modes...video...written report... chart... demonstrating products...financial impact report
- (5) Dynamic interaction of service, research, and teaching.

Application of criteria

A professional service record that includes all types of service (i.e., students, institution, discipline or profession, community) warrants a more favorable evaluation than one that is confined to a single type

...service carries the connotation of a pro bono activity; however, some professional service is remunerated. Remuneration may be used as one index of value. ...substantial remuneration may transform professional service into professional consultation...fees that are excessive preclude inclusion under service.

Michigan State University

Four Dimensions of Quality Outreach: significance, contextualization, scholarship, impact Matrix for evaluating the quality of outreach activities:

Impact	Did the project develop mechanisms for sustainability and ultimately university detachment? What capacity was built by the project? To what extent is the project expanding across to the university by extending outreach in time, distance and place, format and approach?
Scholarship	Number of publications on outreach scholarship? Number of invitational addresses or involvements about outreach
Context	To what extent did the project fit with the individual's and the unit's available expertise and research priorities? What types of partnerships and collaborations were established?
Significance	Was the problem important, i.e., how serious was the problem and what social, economic, and human consequences could have resulted from not addressing the problem? What was the issue's magnitude; i.e., what were the size, trends, future directions and geographic distribution of the problem? How visible or prominent was the issue; i.e., to what extent was the public aware of the problem? To what extent did the project address the university's mission of teaching, research and service?

Portland State University

- ...community outreach that is tied directly to one's field of knowledge and that engages a person's scholarship from governance and professionally-related service
- ...community outreach can all be performed in scholarly ways

To earn tenure and promotion... faculty are expected to make contributions to knowledge as a result of their scholarship. Scholarship, whether research and creative activities, teaching and curricular activities, and community outreach, should be judged by the following criteria:

a. Clarity and relevance of goals

- b. Mastery of existing knowledge
- c. Appropriate use of methodology and resources
- d. Effectiveness of communication
- e. Significance and impact of results
- f. Consistent ethical behavior
- ... assessed by peers and other multiple credible sources

Faculty are expected to establish a scholarly agenda that articulates an individual's focus on contributions to knowledge through varying weights and emphases on each of the scholarly responsibilities of research and creative activities, teaching and curricular activities, and community outreach.

Scholarly accomplishment in community outreach go beyond high quality service to the local community. ...lessons learned through scholarly activities should be communicated with others regionally, nationally and internationally to advance the discipline or interdisciplinary field, and should be subjected to review by peers and other multiple and credible sources.

Faculty engaged in community outreach make a difference in their communities and beyond by defining or resolving problems or issues that should be of concern to society, by facilitating organizational development and improving existing practices or programs. Scholars make an even more important difference when the knowledge gained in such projects is widely disseminated and has a significant impact on others that would otherwise not benefit directly from the project.

Examples of important community outreach activities

- Contribute to the definition or resolution of a problem or issue that should be of concern to society
- Use of state-of-the-art knowledge to facilitate change in an organization or institution
- Use of disciplinary or interdisciplinary expertise to help groups of individuals or organizations in conceptualizing and solving problems.
- Setting up intervention programs to prevent, ameliorate, or remediate negative outcomes for individuals or groups, or to optimize positive outcomes;
- Contributing to the evaluation of existing practices or programs;
- Professional services, such as consulting, serving as an expert witness, providing clinical services and participating on boards and commissions outside the university
- Publishing in journals or presentations at disciplinary or interdisciplinary meetings that advance the scholarship of community outreach

Virginia Tech 5/9/09

Research and Creative Activities

While both the quality and quantity of a candidate's achievements should be examined, quality should be the primary consideration. Quality should be defined largely in terms of the work's importance in the progress or redefinition of a field or discipline, the establishment of relationships among disciplines, the improvement of practitioner performance, or in terms of the creativity of the thought and methods behind it

International and Professional Service and additional Outreach and Extension Activities

- ...It is important to show the professional quality of a candidate's achievements through such means as qualified peer review, stakeholder evaluations, reviews of published materials, conference and workshop assessments and letters from committee chairs.
 - A. International programs accomplishments
 - B. Professional service accomplishments
 - C. Additional outreach and extension activities and outcomes

- a. Peer evaluations of extension programs
- b. Professional achievements in program development, implementation, and evidence of impact
- c. Outreach and extension publications including trade journals, newsletters, websites, journals, multimedia items, etc.
- d. Presentations in area of expertise to community and civic organizations, including schools and alumni groups, etc.
- e. Service on external boards, commissions, and advisory committees
- f. Expert witness/testimony
- g. Consulting that is consistent with university/department priorities
- h. Recognitions and awards for outreach and extension effectiveness

Texas Tech May 2008

External service

...engagement may take many forms such as contributing to the shape and direction of philosophies and policies of the community and/or profession or the maintenance and/or enhancement of professional expertise through practice of a profession.

Evidence of higher-level involvement in and evaluation of leadership in community and professional service may include but is not limited to:

- Leadership roles in professional and learned societies
- Professional services as a consultant, nationally or internationally
- Involvement in the organization of national or international conferences
- Editorial role in venues publishing high quality and significant articles.

Florida International, February 2007

[for promotion to rank of associate and/or professor]

...service to schools, agencies, companies and community organizations; and evidence of service to the department, college or university, including participation in collegial governance.