

AC 2010-716: INTERNATIONAL ACTIVITIES: FROM AN ASSISTANT PROFESSOR'S PERSPECTIVE

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International Activities: From an Assistant Professor's Perspective

Abstract: International activities in the form of developing research collaborations or faculty and student exchanges are important new directions which nearly all university and colleges are pursuing. In the last year I have had the opportunity to visit universities in Costa Rica, Mexico, Ireland and Germany, each providing wonderful and unique experience for myself and students. While international activities are personally exciting and rewarding, an assistant professor must maintain focus on the overall goal and choose wisely as to where to spend their limited resources of time and energy. So the question presents itself, "Is this the best use of my time as an assistant professor looking to gain tenure?" Publishing scholarship in journals and at conferences, obtaining funding for projects, achieving good teaching evaluations and providing good service to the department, college and university seem to be criteria for which promotion and tenure is granted. This paper looks at each of these criteria and how they are impacted by international activities. The amount of time involved, cultural and language differences and logistics of implementing research collaborations and educational programs are reviewed. Feedback on this question solicited from other faculty and deans is provided. Through this paper, the author hopes to begin a dialogue concerning the benefits and pitfalls of international activities for new faculty.

Introduction: Globalization is a process in which regional societies, their economies and cultures are becoming integrated through worldwide communications. Most universities, cities, states and countries are spending a great deal of resources to insure their organization is involved in this process. Phrases such as "Meeting Global Challenges" and "enhancing student success with careers in a dynamic global society" are used in two of the three major goals in our university wide strategic plan¹. For a faculty member this translates to engaging with universities abroad to develop research opportunities and student exchange programs. Perhaps the faculty member can become involved in global issues such as hunger, energy, clean water and healthcare. They can teach their students about other countries or sponsor activities for visiting scholars. The opportunities are exciting and endless.

Academic promotion and tenure (P&T) criteria vary in detail between universities, colleges and departments. The specifics are continually changing as these organizations are developing and adjusting to new challenges^{2,3}. Some universities are beginning to evaluate international activities in the P&T process⁴. However, a general thought which has been prevalent for some time now is that P&T from assistant professor to associate professor requires the candidate be regional known for their accomplishments. To become a full professor the candidate must be nationally or internationally known in their area of expertise⁵. Many indicators support these criteria such as number of publications, number of citations for each publication, number of grants awarded, and professional activities. Other indicators as to the effectiveness of the candidate as a teacher such as teaching scores or the number of students mentored are important as well as the number of departmental, colleges and university committees supported and in what capacity. Preparing oneself for P&T is an exciting opportunity as well, but also a difficult task which must be studied in the context of your own institution.

This paper presents one path toward P&T which included many international activities. It describes the opportunities presented and looks at the benefits and drawbacks of these opportunities as they relate to

P&T criteria. Finally feedback from various faculty and administrators is presented to provide additional points of view. Through this paper the author hopes to begin a dialogue about the decision of an assistant professor to become involved in international activities.

International Activities Accomplished: At Purdue University many international activities are available to students and faculty at the university level as well as through the individual colleges and departments. I have enjoyed the opportunity to participate at all levels in a variety of countries in the past two years. Each program is briefly described in this section.

Costa Rica – In February 2008 The College of Technology (CoT) at Purdue University arranged a trip to Monterrey, Mexico and Cartago, Costa Rica to review possible research and teaching collaborations. The trip was arranged by the College's International Program Officer (IPO) and was attended in varying phases by the IPO, three professors at varying ranks and a graduate student. I was able to participate only in the portion of the trip where we visited the Instituto Tecnológico de Costa Rica, ITCR. The visit consisted of one full day of touring the institute facilities, talking with faculty and administrations, a luncheon and dinner. The institute's administrators have since visited our university to continue discussions of student and faculty exchanges as well as international research collaborations.

Mexico – Purdue University International Program's Office arranged a trip to Mexico in May 2008. The traveling group included the Dean and Assistant Dean of the international office, professors from Health Sciences, Philosophy, and Technology and academic advisors from English and Physics. Five universities were visited in four cities over twelve days. The universities visited were Tec de Monterrey in Monterrey, The University of Veracruz in Xalapa, The University of Yucatan in Merida, and the Tec de Monterrey and the National Autonomous University of Mexico (UNAM) in Cuernavaca. The trip consisted of a travel day, a day of university information and a day of cultural activities in each area of Mexico. In Cuernavaca two universities were visited so a cultural day was not possible.

Ireland – In March 2009 the CoT at Purdue University arranged a workshop for several of its faculty to visit the Dublin Institute of Technology (DIT) to discuss international research collaborations. The trip was organized by the Dean of Research of the College and attended by faculty in all eight of our departments. DIT was chosen as it is similar to our college structure with comparable departments, research and teaching activities. The trip consisted of a half day poster presentations, a group dinner and a full day of research seminars. Faculty from each institute presented their posters in an informal environment to allow for discussions of research interests. Formal research presentations were also provided by faculty of each institute. These were provided in two simultaneous tracks during the day arranged by areas of interest. A follow up workshop is planned for the Spring 2010 time frame in which the DIT faculty will visit Purdue University.

Germany – The CoT at Purdue University has an ongoing Atlantis Grant to provide various international activities to students and faculty. In May 2009, we provided a study abroad program at Hochschule Darmstadt, University of Applied Sciences in Germany. The program was entitled Technology, Innovation and Energy in Germany and Europe. It was attended by ten students from the Colleges of Technology and Engineering and an alumni of the university. The leader of the group was a full professor of the CoT and I attended as a backup to my department head who was not able to attend.

Another department head of the CoT also attended part of the program. The program consisted of various seminars by faculty of the Hochschule Darmstadt, university facility tours, tours of the European Space Agency, Opel and John Deere manufacturing facilities, communications centers and energy companies. Many social activities were also provided to allow students of both countries to interact and learn from one another.

Criteria for Promotion: The criteria for P&T do not exist in the form of a checklist. No one can tell you how many publications are required or how much funding must be obtained or what levels of teaching evaluations are necessary. In fact, the goal of P&T is a moving target as organizations grow and adapt to changing academic climates. For the purposes of this paper, the requirements for P&T will be discussed in general terms. The upper most tier is in which category the candidate will be put forward for P&T: Learning, Discovery or Engagement. In each of these categories scholarship may take the form of publications, presentations, books and chapters, new course material, and patents to name a few. Through scholarship the candidate obtains the necessary peer recognition. Funding is necessary to support the candidate's works in each of the three categories. The funds available will provide release time, graduate student support and resources such as equipment, supplies and travel expenses. Student mentorship is a major responsibility of a faculty member. This activity may be as formal as classroom teaching, masters and PhD projects supervised or advising a student organization. Informal mentoring occurs every day through brief hall room meetings, email, or phone calls but which can make a significant impact on a student. Obtaining peer recognition and funding and providing student mentorship take a great deal of time and energy which the candidate must balance in whatever category they choose. International activities can support these vital activities but must be chosen wisely as the international aspect can increase the expenditure of time and energy tremendously.

Benefits of International Activities: The benefits are both professional and personal. Personally, international experiences provide opportunities for the candidate to learn new ideas and methods for instruction, new areas of research and increase their knowledge of student interactions. In the case of travel to Germany, I was exposed to the European style of education. The students are held accountable for their own education, homework is not assigned daily in fact it is not even graded. 70% of the final grade for a class is based on the final exam. While this seems to lead to an increase of failing grades, the students appreciate the independence it provides and learn to be more responsible for the education. In Ireland, I interacted with research teams which seemed much more prevalent than we see in the United States. The individuals developed formal teams with a greater goal in mind as opposed to individual research activities which reach out for collaboration when necessary. In Costa Rica and Mexico many of the research facilities were not modern however significant research was being performed. These laboratories may be compared to the facilities of Einstein or Edison in that extraordinary facilities are not required for cutting edge results. In other places of Mexico the facilities were state of the art providing the capability to perform nanotechnology and biotechnology research.

Professionally, the experiences provided opportunities for scholarship and teaching. At the University in Costa Rica, they had just received their first Atomic Force Microscope (AFM), but had no one who knew how to operate it. As this is my area of research, I was asked to help train their faculty and students on the use of the instrument and the research in which it could be used. At the Tec de Monterrey in Cuernavaca they were interested in the new courses I was developing in nanotechnology. It was suggested that I spend a semester at their university teaching the class in English. In Ireland the research of one particular group was very intriguing and we saw many opportunities for collaboration.

In this case the discussions are still ongoing and one of their faculty members will be visiting Purdue University for a sabbatical. I feel this collaboration will take hold and result in scholarship.

Drawbacks of International Activities: As mentioned previously there were many opportunities to develop scholarship and teaching activities with international colleagues. However, many of these have not come to fruition. A common phrase used is “out of sight, out of mind.” This can be true across an individual campus or even in the same building but different floors. It is even more difficult to overcome when the collaboration must occur over a large distance. Most communications must be done electronically or over the phone. To meet in person, one must travel great distances which can take up valuable time and resources. Trying to share samples or data internationally can cause additional problems with import/export authorities. Language barriers must be overcome. During the trip to Mexico we were fortunate to have a native speaking graduate student who translated many of the conversations. Without her assistance, these meetings would have been extremely futile and uncomfortable for both sides. Cultural aspects of an international collaboration also must be considered. Many countries can be much more formal than the US while others are less. The workday is not the same. The approach to discussions can vary widely. These among many other factors must be considered when developing international collaboration which again leads to the amount of time required.

Other’s Thoughts: The opinion of faculty and administrator colleagues were solicited for the question of international activities for assistant professors working toward tenure. The views varied widely. Many colleagues from within my academic department consider international activities to be a waste of time, not only for the faculty member but also for the students. They felt the main emphasis of an undergraduate student should be the technical education. However, others in the department are supporting various international activities. From our department alone, opportunities to visit Germany, China, Ireland, Italy and Peru have been made available to students throughout the program. Our department head is a strong proponent for these activities and has supported all the travels previously mentioned. Other faculty within our college have suggested international activities are great, but be sure to get some type of scholarship out of it, i.e. publications. They remind assistant professors, it is the number of publications which will lead to tenure. When this question was raised to our academic dean, he felt it was probably a good idea for an assistant professor to wait until tenure is obtained as these activities require so much time and effort to really be fruitful. Finally the academic dean of the International Programs Office at Purdue University was posed the question. He provided the following: “The question is how the “overall goal” upon which you feel you must focus is defined, and by whom. The university has clearly defined this goal in the strategic plan. It is now a question of how individual faculties (and primary committees) interpret this goal and how quickly they translate this into meaningful practice and metrics for new professors seeking tenure (and other measures of academic output like student success). This speed is a function of local and executive leadership and priorities... For example, in Agriculture, you cannot receive tenure unless you’ve undertaken the very activities you describe in your abstract⁶. ” Obviously, the recommendation to pursue international activities depends on one’s own involvement. This Dean’s opinion reflects the moving target of P&T and one can expect international activities to become an integral part of the P&T criteria at sometime in the future.

Summary: This paper provides one assistant professor's perspective of international activities influence on P&T criteria. The international activities in which I have been privileged to participate have been summarized. The P&T criteria have been generalized and the impact of international activities on this criteria have been explained. It is important to mention the surface of this impact has just only been scratched in this paper. There are many personal instances which could not be covered such as learning to grow as I dealt with students who were intoxicated in a foreign country, trusting interpreters in technical interactions and taking recommended medication which was not written in English. Professional growth was also obtained through these activities in communicating with Purdue University colleagues who also attended these trips and following up with the contacts in other countries. This paper is written to begin the dialogue of international activities for assistant professor looking forward to the goal on P&T. There are many opportunities available to younger faculty as they become a member of various listserves and email list. It is up to the faculty to sift through the multitude of options which may divert their attention and keep their focus on the goal.

References:

1. Purdue University 2008-2014 Strategic Plan, June 2008.
2. Rose, Suzanne, Perfecting your Portfolio: Preparing for Promotion. FASEB Journal, Vol. 21 Issue 5, pA33-A34, April 2007.
3. Foos, Annabelle, et al., What Does it Take to Get Tenure?, Geotimes, v.49, no.5, p.38-9, May 2004.
4. International Business: Institutions and the Dissemination of Knowledge, edited by Brian Toyne and Douglas William Nigh, University of South Carolina Press, 1999. pg. 211.
5. Purdue University Policies and Procedures for Academic Promotion, August 2009.
6. Personal communications with Dr. Andrew Gillespie, Academic Dean of the International Programs Office, Purdue University, October 2009.