Engaging Faculty across the Community Engagement Continuum

Irena Gorski

The Pennsylvania State University

Khanjan Mehta

The Pennsylvania State University

There currently exists an incompatibility between the demands of university administrators for increased community engagement and the realities facing faculty who want to integrate it into their academic coursework, research, and professional service. This article provides insight on the complex challenges preventing faculty from becoming involved in reciprocal community engagement endeavors. It explores four factors to consider when recruiting faculty: where they are on their career track, access to resources, control over their teaching and research activities, and their interest and preparation. This article suggests that rather than viewing community engagement as a binary state where a faculty member is integrally engaged or not, faculty engagement can be viewed along a continuum where they are engaged in a variety of ways with different degrees of engagement and commitment. Finally, this article provides several examples of the multi-tier approach that Penn State has successfully championed to involve more faculty in community-engaged work by understanding their perspectives and meeting them where they are.

Keywords: community engagement, faculty, tenure, institutionalization

Introduction

The higher education system in the United States is placing a greater emphasis on community engagement as the core of its identity and mission. Institutions have demonstrated their commitment to community engagement by supporting research on the civic mission of universities (Boyer, 1990; Driscoll, 2009; Kellogg Commission, 1999), allocating resources to support university members in pursuing community engagement projects (Bernhardt, 2015; Cornell University, 2015; Weerts & Hudson, 2009), changing practices and policies to encourage engagement (Michigan State University, 2015), integrating engagement into the curriculum (UMass Civic Engagement and Service-Learning, 2015), and seeking external validation, such as that provided by the Carnegie Classification (Carnegie Foundation for the Advancement of Teaching, 2015).

Community engagement is defined in this article as university members reciprocally engaging with groups of people outside of the university in order to create and disseminate new knowledge, improve understanding, and address shared problems. As community engagement is now a priority at hundreds of universities, a myriad of approaches are being adopted to build a culture of engagement across institutions. Such approaches include the development of community-based academic programs and co-curricular activities, integration of service-learning components into a wide array of courses, and awareness-raising endeavors that build pipelines into the ecosystem of engaged programs. These boundary-spanning strategies are based on the recognition that there is no one-size-fits-all strategy for every disciplinary culture; the realities facing different disciplines are reflected in the multiplicity of engagement approaches championed across the nation.

A synthesis of the literature suggests four key challenges to engaging faculty in community-engaged activities: (1) nature of appointment and phase of career, (2) access to resources, (3) control over teaching and research, and (4) interest and preparation for community engage-

ment (North Carolina State University Scholarship of Engagement Task Force, 2010; Sobrero & Jayaratne, 2014; Sturm, Eatman, Saltmarsh, & Bush, 2011). In light of these challenges, The Research Universities Civic Engagement Network (TRUCEN) advocates that universities employ many different types of community engagement strategies that are appropriate for their faculty and the communities with which they want to work (Doberneck, Glass, & Schweitzer, 2010; Stanton, 2008).

This article describes the complex challenges facing faculty who want to engage with communities through their teaching and research. It presents eight factors to consider when determining how to engage faculty from different disciplinary cultures through varying depths of engagement. In the backdrop of common challenges that faculty members face when pursuing community-engaged teaching and research, the unique contribution of this article is in helping faculty find optimal ways of engaging while taking into consideration their peculiar individual and institutional circumstances, resources, and personal and professional aspirations.

Genesis

This article owes its genesis to a series of pilot tests in academic collaboration and organization related to community-engaged learning and scholarship conducted with more than 150 faculty members over an eight-year period. The goal was to develop lean and scalable engagement ecosystems to ensure that every one of our 90,000 students across 24 campuses has a compelling engaged scholarship experience. Faculty from widely varying disciplines were engaged in these innovative engagement ecosystems.

Early in this process there was a clear recognition that having all students and faculty work shoulder-to-shoulder with community partners was neither practical nor desirable. Another observation was that while new faculty as well as their administrators viewed their efforts on a binary scale (either one is "community-engaged" or one is not), in reality, there were as many degrees of engagement along a continuum as there were participating faculty members. The question was not "Can there be a real-world community-based component for this course?" but rather, "What is the most innovative, practical and sustainable community-focused real-world aspect that can be integrated into this course that will help students, faculty, their departments, and partnering communities?" Lessons learned during this process validated the barriers and approaches to faculty engagement presented in the literature and described in this article.

Factors Driving Faculty Engagement

The primary factors that drive faculty engagement are in the areas of career track (nature of appointment, specialization, and rewards), access to resources (financial support and staff support), control of teaching and research (course coordinator and department heads), and interest and preparation for community engagement (travel and interaction) (North Carolina State University Scholarship of Engagement Task Force, 2010; Sobrero & Jayaratne, 2014; Sturm, Eatman, Saltmarsh, & Bush, 2011). These factors are presented in Table 1.

Table 1
Engagement Factors for Consideration

Areas	Specific Factors
Career Track	Nature of AppointmentSpecializationRewards
Access to Resources	Financial SupportStaff Support
Control over Teaching and Research	•Course Coordinator •Department Head
Interest and Preparation	•Travel •Interaction

As engaged scholarship continues to be given a higher priority at more universities, we can expect that more faculty, who all face a variety of challenges which can include career and personal limitations as well as lack of experience with community engagement, will be encouraged to become involved. Before determining the optimal style and depth of engagement activities, it is essential for all involved in community engagement to understand and articulate their realities and aspirations. This section provides a set of questions for faculty to ask themselves, for administrators to understand (and to ask their faculty), and for engagement coordinators to ask when they consider designing and supporting engagement projects. These questions can help them build long-term partnerships by meeting faculty strengths and needs, where they are in their circumstances and aspirations, and optimizing how they fit into the broader community engagement ecosystem.

Career Track

A faculty member's career track is what drives the expectations of their appointment with respect to research, teaching, and service. The following questions are for administrators, engagement coordinators, and community organizers to consider when recruiting faculty for community engagement relating to their career track. Will their faculty appointment lend itself to community engagement work? Do the faculty member's research and teaching interests align with community engagement objectives? Are faculty rewarded in the tenure and promotion process for community engagement work?

Nature of Appointment. The nature of a faculty member's appointment directly influences their ability to incorporate community engagement into their responsibilities. Faculty appointment types include tenure-track, non-tenure-track, research, teaching, adjunct, and extension, among others. There are also rankings for appointments, typically based on experience and accomplishment. These include instructor, assistant professor, associate professor, and professor, which are typically based on experience and accomplishment. Each faculty member's appointment has its own set of responsibilities, which vary by semester, usually distributed between teaching,

research, and service. Some faculty appointments are more suited to community engagement, such as those that have a high allotment for extension or service. The ability of other faculty members to incorporate engagement into their teaching and research will likely vary by semester, as well as the applicability of their teaching and research to community interests.

Specialization. Some faculty members are specifically hired for specialized research. In those instances, traditional community engagement would be a distraction, and detract from their work (Doberneck, Glass, & Schweitzer, 2010; Townson, 2009; Vogelgesang, Denson, & Jayakumar, 2010). In general, more applied areas of research naturally lend themselves to community engagement efforts. For conceptual researchers, the use of a collaborator with shared interests could more effectively identify, test, and implement the applications of their research. In addition to different levels of faculty specialization, community engagement trends also vary by university. In some university cultures, there may be favorable views of public lectures on research findings, yet they might not be so supportive of a K-12 outreach program to get young students interested in STEM fields.

Rewards. Faculty face increased pressure to conduct research, teach, advise students, and perform other professional activities (Sorcinelli, 2007; Ziker, 2014). It is difficult to add community engagement to their duties, especially since it is often viewed as "service," which is currently of little value in the academic reward structure (Vogelgesang, Denson, & Jayakumar, 2010). Most institutions do not reward faculty engagement; it is seen as an impediment to promotion, as it takes away from other more "meaningful" work (Driscoll, 2009; Weerts & Sandmann, 2010). It is unreasonable to expect faculty members to risk penalization in career advancement for the pursuit of community engagement if we cannot realign our standards for promotion and tenure at an institutional level to reward participation in these activities.

Resources

Resources, such as financial support and staffing, can be a major barrier or enabler for faculty members who may want to be heavily involved in community engagement. A question for institutions to consider would be: Does the university provide financial support or personnel support for faculty to conduct engagement activities relevant to their work? Lack of funding for students and project development, decreasing financial support over time, or a lack of compensation for time invested in community engagement work can prevent faculty members from incorporating community engagement into their professional activities (Weerts & Hudson, 2009). While many faculty members are willing to commit their time to running engagement programs, it is often not reasonable to expect faculty members to commit additional time seeking external funding. On top of organizing and planning the logistics of community engagement projects, actually building relationships with community members and organizations is a long-term, time-consuming activity. Professional and non-professional staff can support engagement work and reduce the time commitment necessary for community engagement activities.

Control

As much as a faculty member may want to incorporate community engagement into their courses and research, they may not have the control necessary to do so. This leads to another question for consideration: How much control do faculty members have over their courses, research,

and other commitments? Course schedules are one of the most variable components of a department or college. Some universities follow a standardized course curriculum while others follow curriculum that is developed by an individual faculty member. Many faculty members who want to get involved in community engagement work face resistance from a course coordinator or department head (Sobrero & Jayaratne, 2014). Sometimes when a faculty member wants to modify the curriculum to enhance the engagement experience, they cannot because it is part of a rigorous academic sequence where specific learning objectives must be met and department heads or chairs believe modifying content will tamper with quality and rigor (North Carolina State University Scholarship of Engagement Task Force, 2010).

Interest and Preparation

There are a number of other questions that must be answered when administrators, coordinators, and faculty consider incorporating civic engagement into the curriculum. The degree of community engagement that is appropriate for a faculty member depends on their interests and how much preparation they have, especially regarding travel and level of interaction. Do the faculty members want to travel and are they able to do so? Is there a specific geographical region that interests them? Are students expected to travel? Is the faculty member able or willing to interact with community members? Is there a specific group of people they want or do not want to interact with through engagement? Are they willing to include and interact with other professors and courses? Do they want their students to interact with community members in person, with a moderator, or online?

Travel. Some faculty want students to explore issues outside the classroom, taking them to the campus' arboretum, the nearest city, or the farthest country. Other faculty may choose to engage with the community in a more indirect way, requiring less travel (Franz, Childers, & Sanderlin, 2012). These efforts could bring the community into the classroom through technology, and use resources on the campus to facilitate these interactions. The decision to travel or not lies with the faculty member, but there can be challenges in terms of other factors, including financial support, time commitments to other responsibilities, and support from department heads. When these three components of funds, time, and support are not aligned, the ability for a class to travel and work within a community is limited. Furthermore, faculty may face additional challenges in their personal lives that prevent them from traveling, such as taking care of young children or elderly parents.

Interaction. There are significant disciplinary differences in faculty members' work with community partners (Townson, 2009). Some faculty prefer to work with students alongside community members, while others prefer to work with community members only through a third party or through online communication. In addition to considering interaction with community members, faculty may or may not want to engage with other professors to make their work interdisciplinary, or partner with other courses to facilitate interdisciplinary thinking among their students. These individualized interests may be due to the experience and comfort level of the faculty member or due to time and resource constraints (Jaeger, Jameson, & Clayton, 2012). A further challenge observed by Bloomgarden and O'Meara (2007) is that many faculty members do not have direct experience working in communities and are not adept in dealing with the messiness of such work. Therefore, they need the support of faculty or professional staff with more experience to plan and run their engagement course or program.

Degrees Along the Engagement Continuum

With the aforementioned considerations in mind, how can we work with faculty who face one or many challenges to engage them in a meaningful and impactful manner? Figure 1 provides a flowchart of questions related to career track, resources, control, interest and preparation to consider while determining which degree of engagement might be appropriate for a given faculty member. Examples of approaches based on the responses to these questions follow.

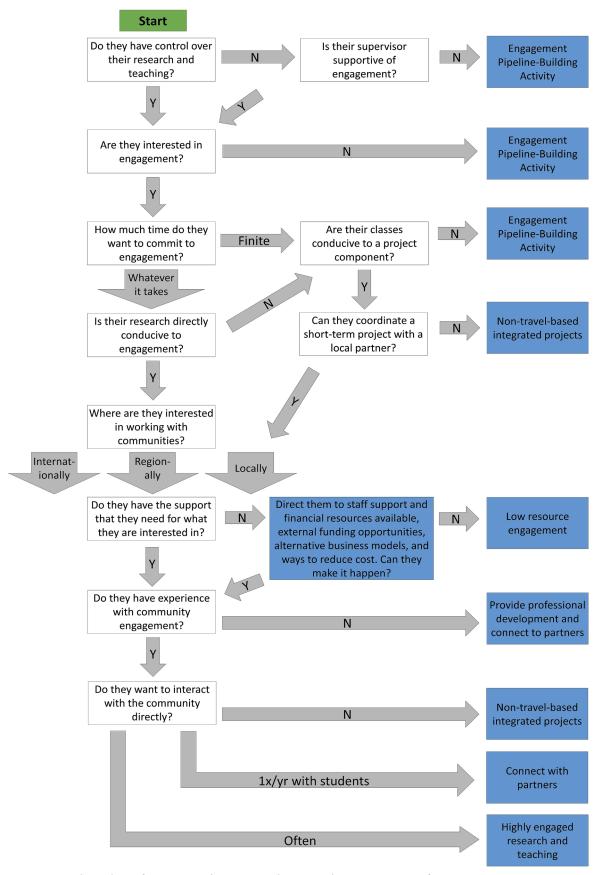


Figure 1. Flowchart for Determing a Faculty Member's Degree of Engagement

Engagement Pipeline-Building Activities

While a faculty member may not have the interest or control to participate in community engagement, they may still be able to contribute to student involvement through activities that build an engagement pipeline. Such activities take place within the boundaries of a course and do not require a significant time commitment from the faculty member. The aim of these activities is to build student interest in engagement programs outside of the course; they are important because despite the many ways to get involved in engagement programs, most students do not participate (Penn State Student Affairs, 2014; Working Group for an Urban Research-Based Action Initiative, 2014). While some students do not participate due to time and financial concerns, many do not know how to find out about community engagement opportunities, or find out about them too late in their undergraduate career to integrate them into their program of study (Kuh, 2005).

Pennsylvania State University has used the following pipeline-building activities for faculty to engage students: (1) professors showing their students PowerPoint slides with engagement opportunities related to their course content; (2) inviting guest lecturers or student ambassadors to their class to talk about engagement opportunities; (3) encouraging students to go to an informational session for a related engagement program; (4) having an assignment for students to plan out engagement opportunities to pursue during their remaining time at the university; (5) assigning engagement programs for students to research and present to the class; (6) urging students to visit a campus engagement fair outside of class time; and (7) requiring students to complete community-focused assignments such as attending a city council meeting or utilizing a community resource like the public library. These examples are just a few of the many ways in which engagement can be integrated into courses where a professor is not interested in engagement, does not have the control to modify their course, does not have experience working directly with community members, or cannot invest the time to build and maintain relationships with community members.

Non-Travel-Based Integrated Projects

Non-travel-based integrated projects are projects that get students to work with community members without physically travelling out of the classroom. This is often done through virtual approaches, which have been championed by several universities to develop student competencies and prepare them for deeper engagement. For example, Michigan State University has integrated online lessons ("Tools of Engagement") that introduce students to the concept of university-community engagement and develop their community-based research and engagement skills (Michigan State University, 2015).

The online lessons are a scalable approach to get more students interested in community engagement because they are created once for multiple uses, they are relevant to students from all disciplines, and they can be integrated into existing courses. At the individual course level, a faculty member at Queens University created a virtual service-learning project for his online students where they used the website Appropedia.org to coordinate an information campaign on saving money and energy by retrofitting traffic lights with LED bulbs (Pearce, 2009). Faculty members at Northeastern University used a problem-based service-learning model where students acted as consultants for a nonprofit organization, completing and delivering commissioned assignments to them via email (Dallimore, Rochefort, & Simonelli, 2010). Both the Appropedia and problem-based service-learning projects provided non-travel-based engagement experiences where the

project enhanced course-based learning while delivering valuable services to a community partner.

At Pennsylvania State University, we have used a model called the Engagement Ecosystem Model where experienced consultants help faculty members embed meaningful projects into existing courses to form engagement ecosystems—networks of students, faculty, courses, and communities working together on compelling, socially-relevant projects around a common theme (Mehta et al., 2015). Depending on the nature of the course, their personal preferences, and departmental buy-in, faculty participate in this ecosystem in different ways. Courses with lower levels of engagement intensity tend to focus on freshman and sophomore students and serve as pipelines for the impact-focused courses and programs. Overall, there are three levels of engagement for students (Table 2).

Table 2
Non-Travel-Based Course's Level of Engagement for Students

Levels of Engagement	Description
High	Students complete projects that are directly relevant to an impact- focused program. Specific project is carved out of the program to be developed by a course directly focused on that topic to bring in necessary expertise.
Medium	Students complete projects that can be useful to impact-focused program but are geared more toward enhancing student learning and stimulating excitement about being partly involved in the program.
Low	Students complete projects that are relevant to impact-focused program and are geared solely toward enhancing student learning and stimulating excitement about getting involved in the program.

While a small group of students can travel and work directly with communities via a travel-based impact-focused community engagement program, this program includes six courses working on non-travel-based projects which directly help the impact-focused courses, and another twenty courses that offer students an exciting learning experience directly related to the community project. Students that do not physically travel have their "minds travel" by working on projects based in different cultural and geographical contexts. The Engagement Ecosystem Model can be built using five tenets: (1) participating in the ecosystem is elective; (2) the ecosystem has broad themes that are relevant across the university; (3) the ecosystem is built around an impact-focused community engagement program; (4) faculty and support staff work with participating professors to carve out projects related to the overarching theme; and (5) courses involved need to have an engagement component (Mehta, Zappe, Brannon, & Zhao, 2016). For practicality, the course's level of engagement is based on the percentage of the course grade committed to the engagement project. However, in reality, students in low-level engagement courses might have a more transfor-

mative experience than those in a high-level engagement course because each student is on their own journey, just like faculty members.

As an example of an ecosystem, non-travel-based projects can be based on an overarching impact-focused program that engages students in the rigorous research, design, field-testing, and launch of food security and healthcare social ventures. Ecosystem projects could include students in a biology course creating brochures on best practices of pest management for greenhouses; students in an English course making videos on greenhouses for smallholder farmers, donors, and students; or students in a health education course designing and testing a short lesson on urinary tract infections. The ecosystem non-travel-based projects can be designed in coordination with students and faculty from the overarching program to make sure they are in alignment with the objectives and community knowledge while ensuring the projects are reciprocal. Tools to increase how well students understand the context of the distant community that they are working with include virtual personas based on people that students in the impact-focused program have worked with as well as example-centric design tools.

Travel-Based Engagement

Working with communities in other states and countries can be resource-intensive if there is a significant amount of travel. If a faculty member cannot obtain the necessary resources to take on a community engagement project that requires travel out of the local community, they can partner with an organization within their vicinity. Travel of a short duration is little to no cost. The class could walk, take a bus, or carpool to the location, communicate with the partner electronically whenever possible, or invite the partner to visit the campus. Of course, too many professors taking this approach will overwhelm local community partners, but it is a viable option for some courses. Further, with the help of a community engagement office matching faculty with community partners and encouraging faculty to think beyond well-known organizations, the local community can be well-served by course-based community engagement activities.

Travel-based engagement has low, medium, and high levels depending on the frequency of travel and interaction as well as the focus on student learning versus the community impact—not on the location (Table 3). An example of high-level engagement may be equitable collaboration with a community throughout the year to solve their saltwater intrusion problem. A low level of engagement may be students cleaning up trash in a community once per semester and writing reflection essays about the experience.

Table 3
Travel-Based Course's Level of Engagement for Students

Levels of Engagement	Description
Impact-Focused	University members and community members work shoulder to shoulder on project(s) driven by one or more community partners. Projects take significant amount of work by the students and collaboration throughout the year. Objective is completely geared toward community impact with student learning as a natural byproduct.
High	Students complete project(s) that are defined by a community partner and are related to learning objectives for the course. Project is part of the course but does not consume the entire course.
Medium	Students complete project(s) that are useful to a community partner but are geared more toward enhancing student learning.
Low	Students complete small project(s) in a community to enhance student learning and their sense of civic responsibility in a global society.

Takeaways for University Members

Graduate Students and New Faculty Members

As academics interested in community engagement look toward their first faculty position, it is important to figure out what career track would be appropriate for achieving their goals and which universities are more supportive of engagement activities. There is often a clear demarcation between pre-tenure, post-tenure, and non-tenure faculty, and it is important to consider which track is going to work for that faculty member's academic career. When interviewing for positions, it is best to clarify how engagement is weighed in the promotion and tenure process before taking an offer. Involving community engagement in courses and research early is a great way for new faculty members to gain experience and build their CVs. Successfully running engagement projects in their courses will show that they can engage students inside and outside of the classroom.

Faculty Already in the System

For faculty already working for a university where their current appointment is not supportive of engagement, they can either revisit the questions and options throughout this article to decide if a certain degree of engagement will still work for them or if they should see if there is any leeway to renegotiate their appointment. One important consideration that might help faculty get the most out of their engagement activities is determining how they can "double-dip" and "triple-

dip" by combining their research and teaching with engagement. Through publishing, enhancing their courses, having a tech transfer, or developing field implementation, faculty can add to their CV. Communicating engagement activities as ways to conduct and publish research as well as provide service to the profession or society can help garner support for them. By carefully examining how engagement activities can produce outcomes that will be valued in the promotion and tenure process, involvement with community engagement may be able to lead to advancement at an institution.

Offices of Service-Learning/Student Engagement

As offices of service-learning, student engagement, and other similar offices are advocating for engagement and lowering barriers, it is best to not have a one-size-fits-all model but rather incentivize and encourage all kinds of engagement activities. These offices can also provide expertise in connecting and coordinating with community partners, which are common barriers for faculty. When recruiting other faculty, discourage the concept that an intense degree of engagement is better than any lesser level. Instead, emphasize that all degrees along the continuum of engagement are necessary. How involved they become may not be completely within their control. Obtaining approval for engagement activities from department heads and course coordinators is vital because they can ensure the activities align with the faculty member's research objectives and course learning objectives.

When considering distribution of resources for engagement, it is important to be wary of faculty who are only interested in short-term efforts; they will not have as strong of a return as faculty interested in running long-term programs. There should also be a split between investing in faculty and investing in programs. Universities need both. Capacity-building for faculty is needed for developing skills such as understanding how to navigate human subjects research issues, figuring out travel logistics and risk management procedures, designing long term business models, and creating assessment tools. You also need capacity-building focused on programs that will stay over time as faculty come and go. Offering capacity building and services like these can lower barriers for faculty who are interested in engagement. In addition, providing assessment tools for programs can draw in more departments because they are more likely to see the value in the data collected than in other outcomes.

Administrators

Engagement activities can be valuable ways for faculty members to produce more articles, further engage their students, and obtain additional funding. Many faculty members have been successful in "double-dipping" with their engagement activities to ensure their success aligns with categories for promotion and tenure. Having an external partner can also provide more funding opportunities for university activities. Some grants are only available to nonprofits or similar organizations; by partnering with these community members, faculty members and the university programs and departments can gain additional sources of funding.

Engagement is one way to involve non-tenure track faculty, graduate students, and fixed term faculty beyond the classroom. The goal is to find alignment between their area of expertise and what engagement activities they can do, not implement a random service project into their course. Through testing the degrees of engagement mentioned in this article at Pennsylvania State

University, the authors have found that there have been many graduate students and faculty who fit into these categories and wanted to keep both their classes and lives exciting. Engagement activities along the spectrum provided the perfect vehicle to add that excitement back into the classroom. This is a win-win: better engaged students while providing a great professional development opportunity for the faculty of the future.

Conclusion

The ability to fully integrate engaged scholarship into academic culture relies largely on faculty members. From past experience, the engagement community has realized how it could go wrong when community members are not a part of the conversation. We can learn from this mistake and realize that faculty members must also be heard and included in order to figure out how they want to get involved. It is important that university administrators understand the complexities of academic interdisciplinary engagement work within their institution, where every college and department has its own nuances, norms, and cultures, and provide the support required to engage faculty at a degree that aligns with their circumstances and aspirations.

While many articles explain faculty challenges with community engagement (Jacobs & Winslow, 2004; Sobrero & Jayaratne, 2014; Townson, 2009), this article delves further into the drivers that enable faculty members to get involved, and provides examples of the degrees of engagement along a continuum to involve faculty members. As engagement is further institutionalized at universities, there will be no "one-size-fits-all" model to get faculty involved. Expecting all faculty to get involved in highly collaborative, travel-based engagement is impractical and undesirable; it can lead to unnecessary pushback from faculty who cannot feasibly fit that work in with their other responsibilities. Furthermore, it can compromise community relationships and lessen the long-term impact envisioned at the onset of the project. Of course, some faculty may be ready for high-engagement, impact-focused programs, some may prefer one-off engagement activities, while others might prefer integrating pipeline-building activities into their courses.

As more faculty integrate engagement into their research and teaching at various degrees, and universities continue to prioritize engagement, there will be opportunities for moving faculty along the continuum of engagement. After several semesters of integrating virtual engagement projects or pipeline-building activities into their courses, they may be interested in interacting with a community partner more directly and then have their students interact with them or bring them into their research projects. Getting a faculty member involved at any degree does not mean they will stay involved at that degree, but as engagement continues to become integrated into the culture of universities, there will likely be room for increased involvement. Once faculty are attuned to incorporating engagement into their teaching and research, they may move between degrees of engagement over time depending on their personal and professional circumstances. Any degree of engagement is a plus for the university over not being involved at all. All forms and degrees of engagement are valid entry points to start faculty on their engagement journeys and propel them on their engagement continuums. An organic multi-level approach can help build stronger engagement ecosystems with equitable and reciprocal growth opportunities for faculty, students, and partnering communities, thus engendering an emergent leap forward for any university and its civic engagement mission.

References

- Bernhardt, K. (2015, October 8). Success and challenges of taking engagement to scale: UW-Platteville experience. *Engagement Scholarship Consortium Conference*. Edmonton, AB.
- Bloomgarden, A. H., & O'Meara, K. A. (2007). Faculty role integration and community engagement: Harmony or cacophony? *Michigan Journal of Community Service Learning*. Retrieved from http://quod.lib.umich.edu/m/mjcsl/3239521.0013.201?rgn=main;view=fulltext
- Boyer, E. L. (1990). *Scholarship reconsidered: priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Carnegie Foundation for the Advancement of Teaching. (2015). *Community Engagement Classification*. Retrieved from http://classifications.carnegiefoundation.org/summary/community.php
- Cornell University. (2015). *Engaged Cornell*. Retrieved from http://now.cornell.edu/engaged/Dallimore, E., Rochefort, D. A., & Simonelli, K. (2010). Community-based learning and research. *New Directions for Teaching and Learning*, 124, 15-22.
- Doberneck, D., Glass, C., & Schweitzer, J. (2010). From rhetoric toreality: A typology of publically engaged scholarship. *Journal of Higher Education Outreach and Engagement*, 5-35.
- Driscoll, A. (2009). Carnegie's new community engagement classification: Affirming higher education's role in community. *New Directions for Higher Education*, 147, 5-12.
- Franz, N., Childers, J., & Sanderlin, N. (2012). Assessing the culture of engagement on a university campus. *Journal of Community Engagement and Scholarship*, 5(2).
- Jacobs, J. A., & Winslow, S. E. (2004). Overworked faculty: Job stresses and family demands. *The Annals of the American Academy of Political and Social Science*, *596*(1), 104-129.
- Jaeger, A., Jameson, J., & Clayton, P. (2012). Institutionalization of community-engaged scholarship at institutions that are both land-grant and research universities. *Journal of Higher Education Outreach and Engagement, 16*(1), 149-167.
- Kellogg Commission. (1999). *Returning to our roots: The engaged institution*. Washington, DC: National Association of State Universities and Land Grant Colleges, Office of Public Affairs.
- Kuh, G. D. (2005). Student engagement in the first year of college. In M.L. Upcraft, J.N. Gardner, & B.O. Barefoot (Eds), *Challenging and supporting the first-year student: A hand-book for improving the first year of college* (pp. 86-107). Jossey-Bass
- Mehta, K., Gorski, I., Liu, C., Weinstein, S., Brua, C., & Christensen, A. (2015). Expanding engagement opportunities at a large land-grant research university: The engagement ecosystem model. *Journal of Community Engagement and Scholarship*, 8(2), 44-58.
- Mehta, K., Zappe, S., Brannon, M. L., & Zhao, Y. (2016). An educational and entrepreneurial ecosystem to actualize technology-based social ventures. *Advances in Engineering Education*, *5*(*1*), n1.
- Michigan State University. (2015). *Tools of Engagement*. Retrieved from http://tools.outreach. msu.edu/
- North Carolina State University Scholarship of Engagement Task Force. (2010). *Integrating Learning, Discovery, and Engagement through the Scholarship of Engagement*. Retrieved from https://ncsu.edu/faculty_senate/items-interest/documents/10-19-10-Symposium-ScholarshipofEngagementPP2010Final.pdf

- Pearce, J. M. (2009). Appropedia as a tool for service learning in sustainable development. *Journal of Education for Sustainable Development*, 3(1), 47-55.
- Penn State Student Affairs. (2014). Student Experience Survey.
- Sobrero, P., & Jayaratne, K. (2014). Scholarship perceptions of academic department heads: Implications for promoting faculty community engagement scholarship. *Journal of Higher Education Outreach and Engagement*, 18(1), 123-151.
- Sorcinelli, M. D. (2007). Faculty development: The challenge going forward. *Peer Review, 9*(4), 4-8.
- Stanton, T. K. (2008). New times demand a new scholarship: Opportunities and challenges for civic engagement at research universities. *Education, Citizenship and Social Justice, 3*, 19-42.
- Sturm, S., Eatman, T., Saltmarsh, J., & Bush, A. (2011). *Full participation: Building the architecture for diversity and public engagement in higher education*. White Paper, Columbia University Law School, Center for Institutional and Social Change.
- Townson, L. (2009). Engaged scholarship at land-grant institutions: Factors affecting faculty participation. *Proquest*.
- UMass Civic Engagement and Service-Learning. (2015). *CESL*. Retrieved from http://cesl. umass.edu/
- Vogelgesang, L. J., Denson, N., & Jayakumar, U. M. (2010). What determines faculty-engaged scholarship. *The Review of Higher Education*, *33*(4), 437-472.
- Weerts, D., & Hudson, E. (2009). Engagement and institutional advancement. *New Directions for Higher Education*, 65-74.
- Weerts, D., & Sandmann, L. (2010). Community engagement and boundary-spanning roles at research universities. *The Journal of Higher Education*, 702-727.
- Working Group for an Urban Research-Based Action Initiative. (2014). *Advancing Community Engaged Scholarship and Community Engagement at the University of Massachusetts Boston*. Retrieved from https://www.umb.edu/editor_uploads/images/research/Report_on_Community_Engaged_Scholarship.pdf
- Ziker, J. (2014). The Long, Lonely Job of Homo Academicus. The Blue Review.

Acknowledgments

The authors would like to thank Nicole Webster and Maurice Smith for their input on early stages of this manuscript; Rebecca Ligrani and Sarah Ritter for their feedback; and the Pennsylvania State University's Council on Engaged Scholarship for their support.

Authors

Irena Gorski was an Engaged Scholarship Coordinator for the Pennsylvania State University, her work focused on designing and testing lean and scalable models to expand opportunities for engaged scholarship for students. She is now a Master of Public Health student at Johns Hopkins Bloomberg School of Public Health.

Khanjan Mehta is the Founding Director of the Humanitarian Engineering and Social Entrepreneurship (HESE) Program and Assistant Professor of Engineering Design at Pennsylvania State University. HESE is an integrated learning, research, and entrepreneurial engagement program focused on developing and commercializing technology-based solutions in low resource settings. In collaboration with his students, Mehta has published over 140 journal articles and refereed conference proceedings with ~50 more in the pipeline. In January 2017, Mehta will assume the role of the inaugural Vice Provost for Creative Inquiry and Director of Mountaintop Initiative at Lehigh University.