

Pathways to Transformation: Institutional Innovation for Promoting Progressive Mentoring and Advancement in Higher Education

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Colleges and universities are facing a number of challenges based on changes in our society (e.g. Zusman, 2005). These challenges include the financial pressures of meeting increasing demands for technology-driven education in an environment where public funding is steadily decreasing, changing public expectations, appreciation and resources for supporting higher education, and a major shifting of the demographics of the U.S. towards racial and ethnic groups traditionally underrepresented in higher education ecosystems.

The composition of individuals, including students, staff, faculty and administrators, in academic institutions largely does not reflect the demographics of the national population. There is significant underrepresentation of individuals from a number of ethnic and racial minority groups, in particular (Moreno et al., 2006). Long-standing underrepresentation represents the outcomes of specific barriers and histories of inclusion and exclusion in academic environments (Girves et al., 2005; Harper, 2012; Hurtado et al., 1998; Moss-Rascusin et al., 2012; Sethna, 2011; Zambrana et al., 2015). Additionally, contributing to this underrepresentation is the common practice of academic institutions promoting a focus on access with a noted tendency to pay less attention to innovation in the realms of promotion, retention and advancement of these individuals (Whittaker and Montgomery, 2014).

The underrepresentation of individuals from specific groups in the academy represents opportunities for innovation at multiple points that impact institutional representation and diversity, including access, retention or persistence, and promotion of success and advancement. While specific groups are underrepresented in academia, there are specific disciplines that have disproportionate rates of underrepresentation – e.g., science, technology, engineering, and mathematics (STEM). The low current rates of recruiting and training individuals in STEM requires significant and quick interventions to avoid major shortages of STEM workers (President’s Council of Advisors on Science and Technology, 2012; U.S. Congress Joint Economic Committee, 2012). Making progress in these areas, the target of multiple interventions and financial inputs for decades with limited rates of success, will require significant innovation and creativity.

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Despite substantial investments in efforts to increase access to or support increased representation of diverse individuals, widespread successes in increasing diversity at the student and faculty levels in higher education have not been realized. A focus on promoting diversity among students (Whittaker and Montgomery, 2012) and in the faculty and administrative ranks (Whittaker and Montgomery, 2014; Whittaker et al., 2015) has led to limited, and frequently short-term or transient, increases in diversity, rather than sustained change or transformation of higher education environments into ones that reflect the demographics and diversity of larger society. The issues related to success in recruiting and retaining students and faculty are intimately linked, and the persistent underrepresentation of individuals in the graduate student ranks from which future faculty members will be drawn delays breakthroughs in increasing diversity of the faculty ranks (Whittaker et al., 2015). However, even compared to the rate of individuals from underrepresented groups who comprise those earning doctorates (~13% of earned doctorates relative to 30% of the national population [Humes et al., 2011; U.S. Department of Education, National Center for Education Statistics, 2012]), individuals from underrepresented groups are drastically underrepresented in faculty and administrative ranks (Whittaker et al., 2015). This suggests that access alone cannot solve the problem; significant attention must also be placed on retention and advancement of these individuals. To realize transformative gains in regard to student and faculty diversity in the academy, culture-changing innovations and creative initiatives are needed. Herein, I focus on interventions including mentoring and institutional transformation related to recruiting and retaining diverse students, faculty, and administrators.

Identifying and mediating environmental barriers to promoting diversity

The role of mentoring in promoting diversity

One area with significant evidence for documented impact on retention among the broad range of individuals in the academy (students, staff and faculty), especially individuals from underrepresented groups, is effective mentoring and promotion of supportive cultures. Access to effective mentoring is positively correlated with recruitment, retention and successful advancement of faculty from diverse backgrounds, and its absence has been specifically noted to have negative impacts on individuals from underrepresented groups (Alexander, 1992; Montgomery et al., 2014; Rockquemore and Laszloffy, 2008; Sorcinelli and Yun, 2007; Turner et al., 2008; Whittaker et al., 2015; Zambrana et al., 2015). Effective engagement of mentoring into the practices and policies of units and institutions is strongly supported by the actions of leaders (Whittaker et al., 2015). Leaders can serve directly as mentors themselves or through their roles of promoting a culture of mentoring and support, as well as related systems of accountability (Bensimon et al., 2000; Laden and Hagedorn, 2000; Whittaker et al., 2015).

Evidence-based mentoring and leadership practices for supporting individuals from underrepresented groups to succeed and advance in the academy have been discussed in detail recently (e.g., Montgomery et al., 2014; Montgomery, 2017; Zambrana et al., 2015). Mentoring often can, and frequently is, provided in ‘top-down’ mode that supports individuals in getting insights and input into factors upon which to focus in the pursuit of institutionally-defined goals or recognized milestones, such as graduation or tenure and promotion, in academic units and institutions (Fig. 1A; Montgomery, 2017). However, shifting the focus of mentoring from transferring knowledge from an experienced or senior colleague to a novice to support advancement of the latter to a more individual-center perspective supports a focus on the

individual's personalized career vision as the motivation to drive mentoring, in the context of a particular institution (Fig. 1B; Montgomery, 2017). The focus of a successful mentoring exchange can then be about supporting a mentee's personalized vision of career success. That in turn positions the individual to contribute in a particular institutional context. An ability to support such individually-centered perspectives of success is central to retention of students, staff and faculty.

Additionally, mentoring that has the greatest impact on promoting individuals from diverse backgrounds focuses bilaterally on individuals *and* the environments in which they exist and seek to advance. Too frequently, approaches to engage individuals in mentoring are focused on individual deficits, rather than on individual potential for growth and development (Montgomery, 2018). In such deficit-focused mentoring perspectives, the environments in which individuals exist and work are largely presumed neutral, or worse are presumed infallible or free of detrimental impacts termed 'environmental barriers' (Whittaker and Montgomery, 2012). Such deficit-focused approaches may limit the potential of individual success. To fully promote the development and progression of individuals in context, specific mentoring and leadership interventions that are based on growth-promoting perspectives and focus bilaterally on individuals and ecosystem health are encouraged (Montgomery, 2018).

Recruitment, retention and innovative faculty development

On many levels, the challenges related to faculty development and engagement (including the aforementioned mentoring) appear to be particularly amenable to innovation and/or creative approaches. One of the primary factors that may support the use and potential outcomes of such progressive innovation in regard to faculty development is the ability to support innovation in an arena separate from the normal faculty review and reward system. Standard practices related to faculty review and assessment largely reward attention to research innovations (Fox, 1992), teaching, and less frequently service; however, these assessments generally occur in a highly competitive environment that can stifle collaboration and true progress beyond incremental innovation (Whittaker and Montgomery, 2014). Thus, new means and spaces may be needed to effectively engage faculty in new developmental opportunities. Any such endeavors should be initiatives that "provide opportunities for faculty activity that both shape the nature of faculty leadership...and set the stage for institutional change" (Castro et al., 2009; p. 212).

Specific recommendations for addressing recruitment and retention

Recommended means for addressing retention of faculty from groups underrepresented in the academy include the following: conducting a thorough climate assessment, intentional mentoring and promotion of leaders from underrepresented groups, promoting collaborative engagement linked to advancement of scholarship, communication and implementation plans to galvanize collective thought and targeted goals, as well as intentional institutional-level interventions (Whittaker et al., 2015). For many of these approaches to have a significant impact, the assessment of institutional climates is a critical early step. There are recognized and evidence-based practices for conducting culture or climate assessments, including specific means for identifying explicit features of environmental climate needing attention (Dowd et al. 2013; Elliott et al. 1996; Hurtado et al. 1998, 2008; Rankin and Reason, 2008; Thompson and Campbell 2013; Whittaker and Montgomery 2012, 2014). If they are to stimulate intended positive outcomes, climate assessments must include honest appraisal of attitudes and processes,

including search and retention processes. These assessments often lead to difficult conversations and need to address entrenched attitudes and practices. Assessments can lead to difficult truths such as that faculty search committee members “rarely view the problem as having to do with how they go about hiring or how their racial beliefs about quality, competence and fit are the root cause of the whiteness of the faculty” (Bensimon, 2018). Inabilities to address such realities can result in the development and deployment of interventions related to recruitment and retention that have limited impact as they fail to address and mitigate underlying and persistent causes (Whittaker et al., 2015).

Moving from implementation of mentoring lessons and faculty development to institutional ecosystem transformation

Instituting practices and systems of accountability designed to shift to improved ecosystems with recognized cultures for support and inclusive mentoring require following culture assessments with targeted interventions to transform cultures when and where needed. Indeed, the outcomes of culture or climate assessments are most impactful when “the results serve as a catalyst for institutional transformation” (Rankin and Reason, 2008, p. 265). One approach with significant merit includes an ecosystem-based approach to institutional transformation which involves progressive steps from education about a particular issue through gathering buy-in/engagement to implementation and scale-up (Fig. 2). This model is designed to promote institutional innovation that includes defined progressive steps—education of internal and external stakeholders, facilitation of broad-based buy-in or stakeholder engagement, implementation of specific change/innovation initiatives, dissemination of outcomes, and strengthening institutional commitment to change and improvement through governance (Fig. 2B). This model is embedded in being responsive to the environment in which change is being initiated. Notably, the system is iterative in that as knowledge is gained (i.e., education), broad engagement and buy-in are cultivated that support improved systems which lead to active implementation (Fig. 2B).

Successful implementation by universities in turn leads to an ability to promote dissemination of useful models (i.e., information sharing), and to move towards institutionalization in which all of what is learned can be used to determine how to govern (i.e., governance) (Fig. 2B). This system for promoting innovation can be impacted by environmental and sociocultural factors (both internal and external) at any point. Thus, to maximize the impact of innovation in complex, dynamic environments, a central part of such efforts requires the intentional integration and cultivation of ‘sensors’ in the system that allow for rapid detection of changes and ensure agility and timely adaptation of the innovation (horizontal red bars in Fig. 2B). Thus, sensors detect what is going on externally and engage across internal and external constituencies to gauge the potential impacts of external demands and challenges and to ensure that effective communication that must be in place between all internal and external elements for any institution to be effective is an integral and actively cultivated part of the system. An assessment of how proposed innovations translate to the external environment can allow both internal and external constituents to experience a transparent, lean approach to institutional engagement and transformation.

Effective utilization of this platform requires bilateral communication, transparency, reiterative buy-in and engagement, implementation and governance that together lead to innovative change and environmental/cultural improvements through iterative learning and agility. These models

have the potential to provide broad-based communication and transparency that engages institutional constituencies across the board and drives intentional policies and institutional level interventions and accountability. Approaches targeted towards such institutional change have been described as “transformational intervention strategies” (Rankin and Reason, 2008, p. 265).

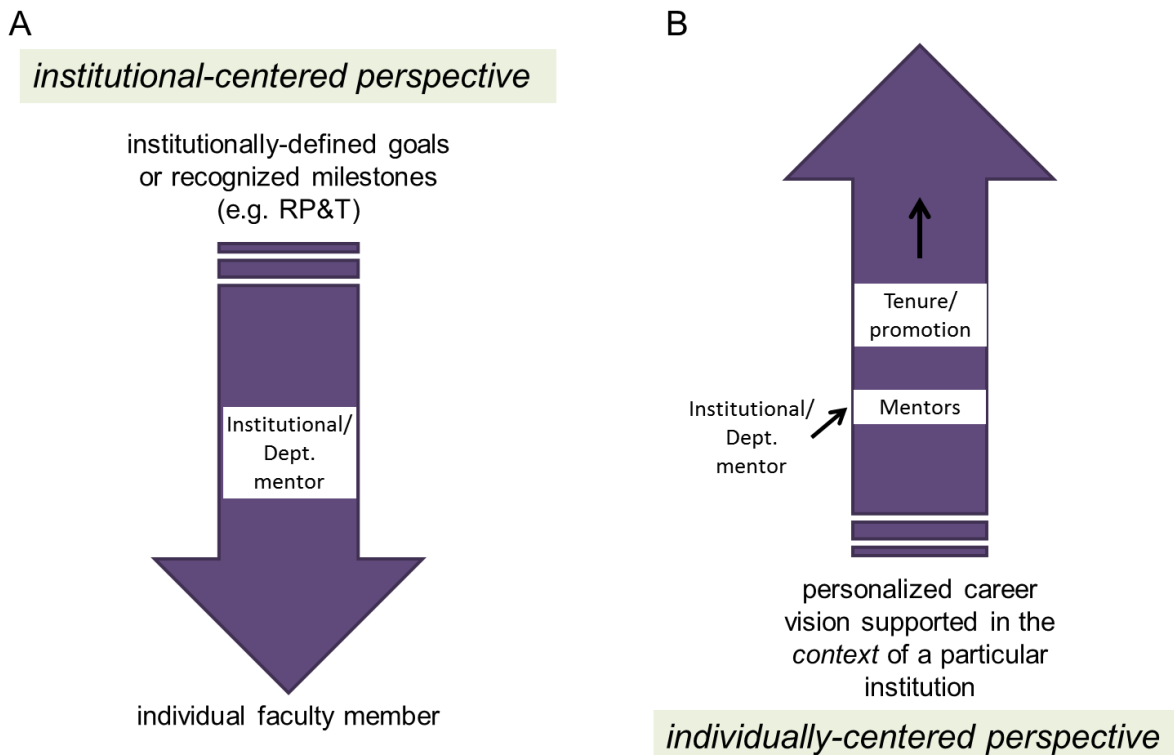
Conclusions

Moving beyond incremental progress in supporting individuals from diverse backgrounds in the academy requires innovations and community-wide engagement. Facilitating progress in interpersonal interactions and building communities of support through structured mentoring, institutional culture evaluation or climate assessment, and institutional transformation to support the growth and success of a broad range of faculty has significant potential for accelerating and sustaining progress. Whereas pockets of success have been noted, such efforts have largely been attributable to individual change agents and social justice advocates committed to effective mentoring and leadership. To extend such efforts to ecosystem-wide approaches for promoting mentoring and other institutional transformations can be supported by intentional models for ecosystem transformation that will require integrated and comprehensive approaches for engaging mentors and leaders widely, coupled with systems of implementation and accountability designed to promote lasting change and innovation in specific institutions and across the higher education ecosystem as a whole.

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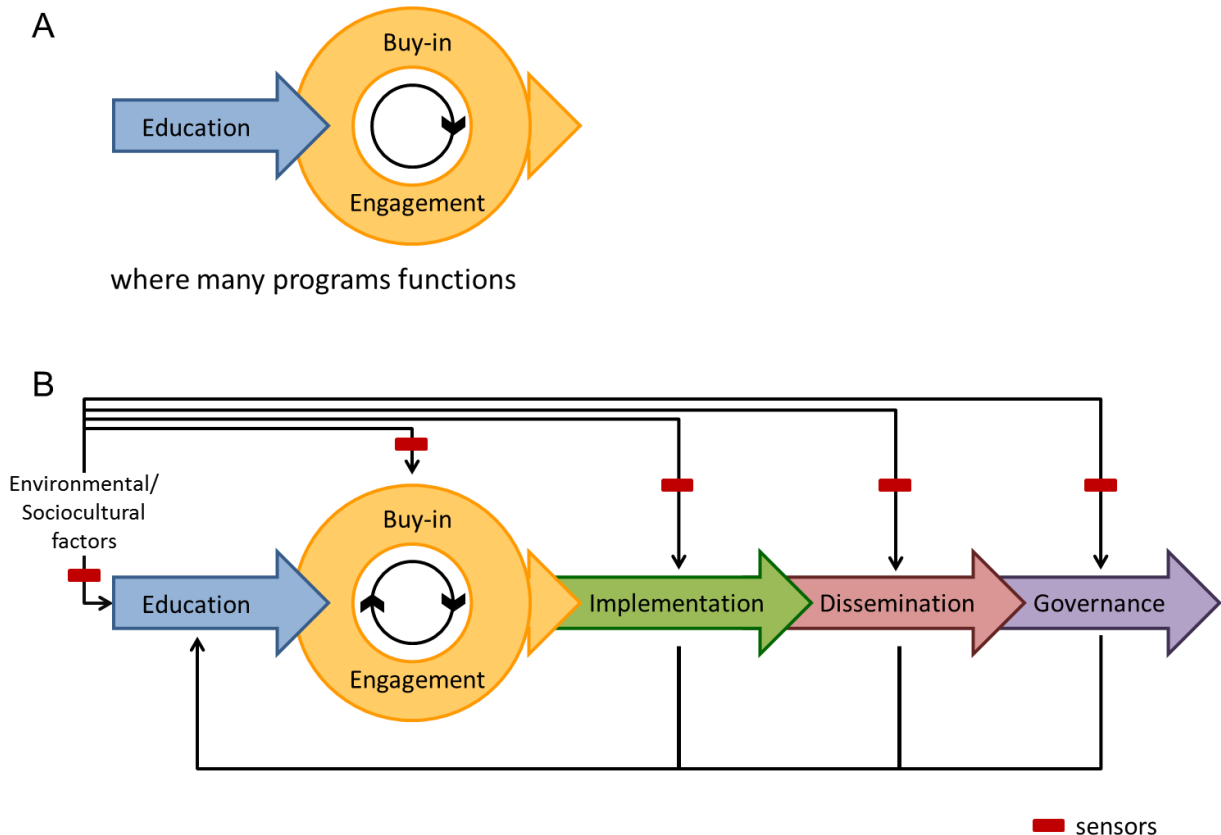
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Figure 1. Alternative Mentoring Models for Promoting Faculty Success.



(A) Traditional mentoring models are centered on providing input into factors that contribute to faculty achieving institutionally-defined goals or successfully traversing towards recognized milestones such as tenure or promotion. In such a mentoring framework an institutional or departmental advisor or mentor, for example, helps an individual understand norms and policies that are a part of the review for promotion and tenure (RP&T) process(es). (B) An alternative model for promoting personalized career success which likewise can contribute to advancement, and *perhaps* increased retention, is centered in identifying and supporting an individual’s personal career vision with insights in relation to the context (department, unit, college or university) in which the individual is working and seeking to advance. The institutional mentor is an important component of the mentoring process, yet, is likely to be part of a larger network of mentors designed to promote a specific individual’s view of career success and professional advancement, including key milestones such as graduation or achievement of tenure, promotion, and beyond.

Figure 2. Change management platform for promoting institutional innovation and transformation.



(A) Frequently engaged attempts to facilitate change in an academic ecosystem are initiated by a cycle of education and engagement observed in academic environments that leads to increase awareness but limited long-term change. Often groups are stuck in endless cycles of education and engagement due to time lapses after engagement or frequently changing priorities; (B) Optimized comprehensive cycle of ecosystem transformation that progresses from education and buy-in/engagement to implementation, dissemination, and institutionalization through governance. Red horizontal bars represent sensors in the system that allow rapid detection of changes in relevant environmental or sociocultural factors, key intervention points and timely adaptation of the innovation intervention. A sensor-facilitated traversing of this cycle is a more comprehensive approach to ecosystem or institutional transformation designed to facilitate lasting change, improvement and/or innovation.

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