

Report Title: Teaching-Focused Faculty in Research-Intensive Universities: Builders of Internal Capacity for Educational Change

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As research-intensive institutions work to design academic programs that can consistently and responsively innovate to meet the constantly evolving needs of all learners, we examine the role of teaching-focused faculty, specifically within the University of California's Professor of Teaching (PoT) position, as a key driver of this change. Using the capacity-building framework to conceptualize this change process, we present research and recommendations highlighting the potential for PoTs to strengthen an institution's internal capacity for pedagogical innovation.

In Short:

- The *capacity building* framework views universities as complex ecosystems that require researchers and educators to address multiple layers of culture and practice to promote student success.
- We argue that teaching-focused faculty (TFF) have a greater potential to increase a university's *internal capacity* to continuously adapt to the changing higher education environment to support student success relative to research faculty and lecturers.
- Research characterizing the University of California's Professor of Teaching (PoT) position highlights multiple means by which TFF increase the university's internal capacity.
- Given that hiring of TFF is increasing across higher education broadly, we provide recommendations, driven by the capacity building framework and situated in the PoT scholarship, that administrators can leverage to increase their institution's internal capacity to meet current and future educational needs.



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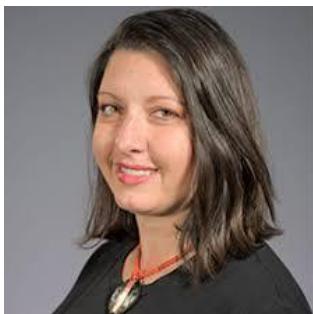
Dr. Sato's research focuses on creating more equitable and inclusive STEM programs in higher education, identifying impacts of teaching-focused faculty, and examining teaching and learning from both the instructor and student perspective. In his administrative capacity, Dr. Sato oversees instructional professional development activities for faculty and future faculty including the creation of more student-centered and culturally inclusive learning spaces.



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Dr. McMurran's research identifies clear and concrete ways that higher education institutes can align to faculty's authentic goals and values related to their work by supporting and facilitating their sense of autonomy, competence, and relatedness or belonging at work.



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As the landscape of higher education evolves, research-intensive institutions face a number of challenges related to fulfilling their educational missions. Demands to increase enrollment coupled with decreased funding have the potential to widen existing academic gaps. Employers are looking for graduates with an increasingly diverse range of competencies, and rapid technological change poses new teaching challenges. Institutions must be proactive in the face of continual change while being flexible enough to adapt to and address emergent challenges; however, they are traditionally slow to respond to such change (Roland, 2004). In this article, we discuss these trends through the context of an institution's *internal capacity for educational change*, by which we refer to the degree to which that institution is capable of adapting to their students' evolving educational needs. The *capacity building* framework highlights the three primary influences on an institution's internal capacity: the individual faculty members (Influence 1), the institution's social and structural contexts, evidenced through policies, practices and culture (Influence 2), and the community beyond the institution (Influence 3).

We propose that teaching-focused faculty (TFF) in particular have great potential to transform the teaching and learning space by increasing the institution's internal capacity for educational change, and in turn promoting student success. Broadly, TFF have a primary responsibility in instruction but many also engage in scholarly work and service activities (Bush et al., 2019; Harlow et al., 2020). A number of research studies have highlighted that TFF are innovators in the classroom and serve as trusted departmental resources in teaching-related matters (Bush et al., 2019; Harlow et al., 2022). One of the most extensively studied TFF positions is the University of California's (UC) Professor of Teaching (PoT), which comprises roughly 10% of the tenure-eligible faculty population across the UC system. On average, PoTs spend two-thirds of their time on classroom instruction, while also engaging in scholarly activities (e.g., discipline-based education research, curriculum development) and service roles (e.g., serving on education-focused committees) (Harlow et al., 2020; Molinaro et al., 2020).

We present extant research that highlights PoTs' current contributions, and how, through innovation and leadership, they are building the research university's internal capacity for educational change ([Table S1](#)). In addition, we provide evidence-based recommendations for administrators to enhance the potential impact these faculty can have on internal capacity ([Table S2](#)). While this work is primarily set within the UC, initial replication work with TFF across the country, along with prior TFF studies, have found similar results regarding their impact on educational leadership and change (Bush et al., 2019; Wilton et al., 2025). As such, we propose that the presented PoT-specific findings reflect trends arising nationwide, and that TFF broadly have the potential to serve as key drivers of pedagogical and institutional change in higher education.

How can complex university systems change?

Institutional change scholars describe organizations as adaptive systems existing in and impacted by dynamic internal and external forces. For example, ecological systems theory (Bronfenbrenner, 2000) posits that achieving sustainable change requires that effort be directed across multiple levels of an organizational ecosystem. Within a university, individual faculty, staff, and students make decisions based on their own skills, experiences, and perspectives, directly influencing their own learning and performance. These decisions are further shaped by interpersonal interactions, which themselves occur within broader university structures (e.g., departments) influenced by policies, administrative support, and institutional history and values. Thus, an institution's ability to produce meaningful and sustained change to enhance student success depends on careful consideration of the individual, interpersonal, and contextual domains that interact within this complex university ecosystem.

Building on ecological systems theory, Stoll (1999) posits that efforts to promote change in higher education must focus on developing an institution's internal capacity, enabling it to flexibly and continually respond to the evolving needs of students. Stoll's *capacity building* framework outlines how (1) individual faculty within the institution, (2) the institution's social and structural learning context, and (3) the external context (e.g., the broader community and the institution's historical and cultural influences) are primary influences that contribute to the institution's internal capacity. Each of these three primary influences are informed by multiple factors (noted in *italics* hereafter) as highlighted in **Figure 1**.

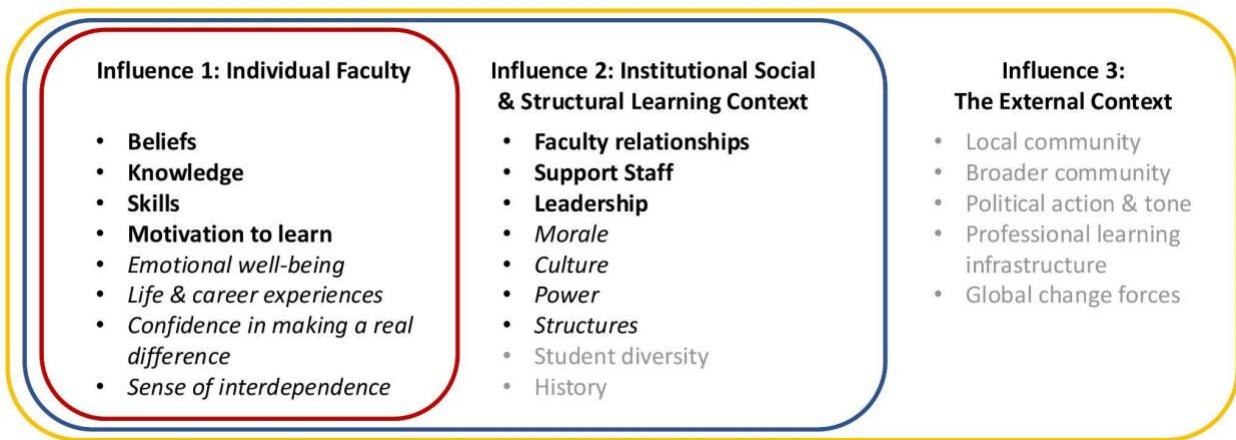


Figure 1. The capacity building framework identifies three primary influences and 22 underlying factors that shape an institution's internal capacity for educational change. Bolded factors represent those with documented evidence that PoTs promote increased internal capacity, while *italicized factors* highlight areas where TFF have the potential to further strengthen internal capacity. Grayed-out factors are those that TFF are unlikely to influence, but still affect an institution's internal capacity for educational change.

An example that can be contextualized in the capacity building framework is widespread faculty intransigence to the adoption of evidence-based instructional techniques despite significant research demonstrating their positive impacts on student academic performance (Freeman et al., 2014; Theobald et al., 2020). While faculty *knowledge* of and *skills* in implementing effective pedagogical techniques have increased in recent years (Borrego et al., 2010; Gardner et al., 2021), this has not yet translated into broad adoption of these practices. So why, despite evidence, does this persist? Research by Brownell and Tanner (2012) suggests that individual faculty lack *motivation to learn* novel pedagogical practices within the social and structural context of research universities, where *leadership* primarily rewards research and not teaching excellence. Thus, a *culture* of instructing exclusively through lecture dominates, and faculty continue to rely on less effective, traditional instructional methods (Freeman et al., 2014; Stains et al., 2018).

Teaching Focused Faculty as builders of internal capacity

In this work, we specifically discuss how TFF are capable of increasing the university's internal capacity for educational change relative to research-focused faculty and lecturers. Research faculty, who comprise the dominant academic role within research universities, often wield significant influence in departmental affairs. However, they are primarily hired for their research potential and evaluated for merit and promotion based chiefly on their achievements in research excellence (Schimanski & Alperin, 2018). Lecturers, by contrast, focus exclusively on classroom instruction and other educational responsibilities. However, they often face well-documented

challenges, including limited integration into departmental culture and insufficient access to professional development and instructional resources, as well as a lack of formal mentorship structures (Kezar & Maxey, 2013; Lynch, 2011). These challenges are known to limit both their ability to serve as effective instructors as well as their ability to have significant influence in departmental matters (Kezar, 2013). However, TFF, while also centered on education, are generally less affected by the challenges that commonly impact lecturers. This is due in part to their more stable and integrated institutional roles: TFF are typically hired on long-term contracts or into tenure-eligible positions, serve in administrative or leadership capacities, receive start-up funding, and may secure external research grants (Bush et al., 2019; Harlow et al., 2020). This combination of departmental and institutional status and pedagogical expertise highlight the greater potential TFF have to enhance the research institution's internal capacity for educational change relative to their faculty and lecturer peers. To illustrate this potential, we draw on empirical work examining the University of California's Professor of Teaching (PoT) role, a specific example of a TFF position. While unique to the UC system, findings from PoT-focused research reveal several commonalities shared with other TFF positions nationally. These include being more likely to adopt innovative teaching strategies, being recognized as pedagogical leaders by departmental colleagues, and engaging in discipline-based education research (Bush et al., 2016, 2020, 2024; Harlow et al., 2022; Paine et al., 2025). We argue that applying Stoll's capacity building framework to the case of TFF, grounded in PoT-focused research, offers a useful model for other institutions seeking to leverage education-focused faculty to drive sustainable, system-level change.

In short, we propose that Professors of Teaching (PoTs) bring two key strengths: (1) deeper pedagogical expertise and experience than their research-focused peers, which enables them to initiate and guide educational change, and (2) strong integration within their departments as trusted and influential colleagues, which allows their expertise to shape teaching practices at both departmental and institutional levels. Drawing on research from the UC system, we use Stoll's capacity-building framework to identify the subset of the 22 factors in which PoTs excel and where additional support can amplify their impact. These insights inform practical, evidence-based recommendations for administrators and campus leaders seeking to leverage TFF roles to build sustainable internal capacity (Figure 1).

What PoTs Have and Do: Capacity Building Factors that PoTs possess that increase the institution's internal capacity for educational change

The degree to which PoTs build their institution's internal capacity for educational change is influenced by (1) their pedagogy expertise and (2) their ability to leverage this expertise to influence their departmental colleagues. These factors are found within Influence 1 (individual faculty) and Influence 2 (institutional social and structural learning context) of the capacity building framework. Though we highlight only these two examples below, a comprehensive overview aligning PoT impacts to these factors, along with recommendations to administrators to better leverage TFF, is presented in the supplemental materials ([Table S1](#)).

Knowledge: An instructor's knowledge of evidence-based pedagogical practices, their course content, and their students' educational backgrounds is necessary to create a classroom space that is capable of fostering the engagement and success of all students. Rozhenkova and colleagues (2023) found that PoTs have more advanced conceptions of teaching and learning relative to their research-focused colleagues, believing that it is their role as an instructor to create a more student-centered learning environment. Additionally, PoTs are more likely to

evolve and innovate as instructors because they possess a sense of responsibility to continuously engage in professional development (Williams & Sato, 2021).

To ensure that TFF bring strong pedagogical expertise to their roles, institutions should prioritize hiring individuals who demonstrate prior experience with and training in evidence-based teaching practices (rather than solely disciplinary expertise~~training~~). Moreover, institutions should provide ongoing opportunities for TFF to deepen their instructional knowledge, such as funding attendance at relevant workshops and conferences, and recognize these professional development efforts in the merit and promotion process.

Faculty Relationships: Greater knowledge of pedagogy, while beneficial for an instructor's classroom, only modestly enhances an institution's capacity for educational change. Sustained, institution-wide change requires that such knowledge be shared and applied collectively across departments. ~~What is necessary is for that knowledge to spread across the institution.~~ Prior work notes that faculty interactions can lead to the formation of dynamic relationships that promote the diffusion of instructional innovations and techniques (Couch et al., 2024). Thus, the connection of faculty ~~via social relationships~~ can build internal capacity to achieve the educational mission of the university. To this end, social network analyses of instructional discussion and influence networks highlight that PoTs play a brokerage role connecting multiple colleagues; importantly, PoTs are more likely to discuss instructional matters and provide advice about teaching to their colleagues, relative to their research-focused peers (Wilton et al., 2024). PoTs may also be involved in graduate student instructor training (Couch et al., 2024) and are significantly more likely to interact with faculty across departments (Grunspan et al., 2021). Thus, PoTs shape the environments they are in by increasing opportunities for faculty interactions regarding teaching. By infusing their expertise into these discussions, they can catalyze future initiatives, thereby building the institution's internal capacity for change.

Suggestions to sustain the influence of TFF in their environment include ensuring that these faculty are placed on prominent department and campus committees that provide input on teaching matters, physically integrated within their department's physical space to increase interaction, and rewarded for their collaboration within and across departments.

What PoTs Have the Potential to Do: Recommendations to enhance PoTs' abilities to increase the institution's internal capacity for change.

Additional research has identified factors that can boost ~~moderate~~ PoTs' effectiveness at increasing internal capacity for change. These findings enable us to offer framework-centered recommendations for campus administrators seeking to strengthen the capacity of TFF to drive institutional educational change. A comprehensive overview of these relevant factors is provided in [Table S2](#), with a discussion of selected elements presented below.

Confidence that they can make a real difference. Research suggests that the ability to influence colleagues' teaching depends on the confidence that PoTs have in their own instructional abilities. McMurran et al. (2024) found that PoTs' confidence in successfully performing their job and contributing to the well-being of their colleagues and students positively relates to institutional factors like the number of faculty peers they consider mentors and the amount of resources made available to them. The authors also found that such confidence fully mediates the relationship between the above institutional factors and PoT's influence on their colleagues' teaching beliefs, knowledge, and practices. Importantly, the perception that PoTs are making a difference within their department is echoed by interview data from key university administrators, including university deans and department chairs, who noted that PoTs influence

their colleagues' teaching practices and serve as key pedagogical resources for their campuses and departments (Harlow et al., 2020). Thus, it is important that mechanisms exist to build PoTs' confidence.

To increase the confidence of TFF broadly, the teaching faculty hiring process should include a discussion of appropriate resources for the selected candidate (e.g., start-up funds), mentorship, and opportunities to participate in professional development. This support is typical universal for research-focused faculty but often not provided for teaching faculty (Bush et al., 2015).

Power Issues. Research focused on PoTs, as well as studies of other TFF positions, has identified a persistent perception that TFF are considered to be "second-class citizens" by their research-focused colleagues. Within the UC system, department chairs have acknowledged several discrepancies between PoTs and research faculty, including less clarity surrounding merit and promotion criteria, and a devaluation of discipline-based education research (often conducted by PoTs) relative to traditional disciplinary research (Bush et al., 2020; Harlow et al., 2022). Through surveys of PoTs' experiences, we have also found that these faculty lines are more likely to have a shared office space and receive smaller start-up packages compared to research faculty, and they do not always include the right to vote in departmental matters (McMurran et al., 2024; Paine et al., 2025). If these power issues exist, they can negatively impact PoTs' perceptions of their ability to perform their job and influence their colleagues (McMurran et al., 2024), thus negatively impacting the institution's internal capacity.

To minimize the potential for these power imbalances, it is important that administrators provide TFF with similar resources and rights as research faculty. If a department wants to leverage the expertise of a TFF but does not provide them with a departmental vote, it is not possible for them to meaningfully contribute to the decision making process. Power imbalances can also occur if TFF are not eligible for certain leadership positions or important service roles on campus (e.g., committees that oversee the promotion process).

Exceptions to the framework in the context of TFF and internal capacity

A fraction of the factors included in the capacity building framework, which are presented as grayed-out terms in **Figure 1**, are less relevant to this discussion of TFF and the building of an institution's internal capacity. These include two from Influence 2 (the social and structural learning context—specifically, *institutional history* and *student diversity*), as well as all factors associated with Influence 3 (the external context). While these factors can significantly impact an institution's internal capacity for educational change, they are typically outside of the direct control of any single stakeholder group, including TFF.

For example, *student diversity*, defined as, "the composition of an institution's student body—including factors like size and demographics—which plays a crucial role in shaping the university culture and functioning" is a key determinant of institutional context. Faculty must be capable of supporting students regardless of the particular student body. Although TFF do not determine the demographic make-up of the student body, they can still contribute to institutional responsiveness to increasing diversity. In this context, it has been demonstrated that PoTs are more likely to implement active learning practices (Denaro et al., 2022), which have been shown to disproportionately benefit minoritized students (Theobald et al., 2020), and that the hiring of TFF from minoritized populations has the potential to better support the success of a more diverse student body (Llamas et al., 2021).

So while factors like *student diversity, local community, or professional learning infrastructure* may not be within TFF's direct sphere of control, this framework allows us to acknowledge how TFF can still interact with these broader structures to enhance an institution's internal capacity for educational change

Conclusion

A central mission of higher education institutions is to promote the academic growth of all of its students. The very definition of student success will be reflected through the diverse and changing needs of different student populations over time. Therefore, to successfully carry out this mission requires institutions of higher education to foster the development of an increased internal capacity for change that allows them to quickly and continuously adapt to the ever-changing needs of their students. The capacity building framework described here conceptualizes universities as complex ecosystems that require attention to multiple levels of personal, institutional, and external context simultaneously to effectively adapt and change in ways that can enhance student success.

In recent years, the emergence and expansion of TFF at research-intensive universities has demonstrated one key way that universities can increase their internal capacity for change to meet their educational missions. While existing research has highlighted that TFF are innovators in the teaching and learning space with significant expertise, we propose that due to their documented influence on their department colleagues in pedagogical matters, that they do in fact increase the institution's internal capacity, priming future change initiatives.

We recommend that administrators consider the capacity building framework to strategically hire and support TFF efforts to meet changing educational needs and to empower TFF to further enhance their ability to contribute to the internal capacity of the university. Similarly, researchers can leverage this framework to more broadly understand the impacts of TFF across the country. By considering the multitude of ways that TFF can enhance an institution's internal capacity, higher education will be better equipped to create more welcoming and equitable academically successful programs and outcomes.

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