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When You Don't Know the Way, Walk Slowly: Our Transition from a Teaching-Intensive University to a Research-Intensive University as Professors of Engineering Practice

Prof. James Canino, Purdue University

Jamie Canino is currently an associate professor of engineering practice at Purdue University where he focuses on integrating active learning in his classrooms. He teaches in the aerodynamics and propulsion fields and can be reached at canino@purdue.edu.

Prof. Steve France, Purdue University

Steve France is Assistant Professor of Engineering Practice at the Elmore Family School of Electrical and Computer Engineering, Purdue University. He has an M.S. in Computer Science from California Polytechnic State University, San Luis Obispo, and over 25 years software engineering industry experience.

Prof. Ruth Wertz, Purdue University

Dr. Wertz has earned a B.S. in Civil Engineering from Trine University, a M.S. in Civil Engineering from Purdue University, and a Ph.D. in Engineering Education.

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Introduction

Faculty moving from teaching to research-intensive universities as Clinical/Professional (C/P) faculty face unique challenges in adjusting to and defining a new role. This paper presents the personal experience, collaboration, analysis, and lessons learned developed by three such individuals. It is intended to provide insights for communities concerned with the professional development of those in similar transitions.

For clarity, we use non-tenure track (NTT) as an umbrella term to describe faculty with full-time status, who are on limited-term contracts, are promotion-eligible, but differ from their tenure-track/tenured (TT/T) counterparts in that they are not eligible for tenure. For the purpose of our narrative, we use "NTT faculty" when the generalized umbrella term is more appropriate, but otherwise we use "C/P faculty" to refer to clinical and professional faculty, like ourselves, who in addition to teaching, have some responsibility to develop a domain of practice. Loosely translated, it is generally understood at Purdue University that C/P faculty focus on teaching and "some other thing."

Our Purpose and Process

This project came about as a series of conversations. First by one author (Jamie) sharing a piece of his story with a colleague, who responded with, "Wow, I think more people would be interested in hearing about this job shift." Then, another conversation a short while later that cemented the idea to document this change from teaching at a small, teaching focused school to a large, research-focused one. During a faculty orientation session prior to our first semester at our new university, we, the authors, discovered common experiences and interests, especially around navigating our new role as professors of clinical practice.

We chose to develop this work in the style of an autoethnography where our driving goal was to reflect on (1) *how the expectations we had starting a new role at research-intensive university aligned with our lived experience*, and (2) *in what ways our expectations were being informed by prior experiences at teaching intensive universities*. We agreed to meet bi-weekly to discuss our experiences and to document them we developed an informal, qualitative process that we followed throughout the semester. This process included three main elements: (1) individual reflections and processing between meetings, (2) group discussion and processing of our experiences at our bi-weekly meetings, and (3) at the conclusion of the term, an iterative process of individual and collaborative review of our reflections and notes to identify and thematically organize key observations and results.

Our Stories (In Brief)

Each of us came to Purdue University in the Fall of 2023 from private, teaching-intensive institutions with enrollments between 2,500 and 3,500 students. We differed in our depth of teaching and industry experience, which is summarized in Table 1.

Table 1. Prior Teaching and Industry Experience of the Authors

Author	Teaching Experience	Industry Experience
Steve	Assistant Professor (NTT), 90% teaching, 2 years	Software development, engineering leadership, 25 years
Jamie	Professor, 90% teaching, 13 years	Mission assurance US Air Force, 3 years
Ruth	Assistant Professor, 75% teaching, 8 years	Geotechnical engineering, 6 years

Steve: After a 25-year career in industry, I transitioned into higher education at a small, private university. While the 2 years I spent there "learning the ropes" was invaluable, it did not fully prepare me for the transition ahead. On arriving at Purdue, I began to realize more clearly how my role would be different from previous work experiences in significant ways, including modifying and scaling of teaching approaches, and the unstructured nature of defining 'engineering practice' in the context of an academic unit.

Jamie: Although, I enjoyed my time at my previous institution, I chose to leave my teaching-focused position for a C/P position at Purdue to explore new possibilities like scholarship of teaching and learning and ABET assessment. However, I have found that my position at Purdue is full of ambiguity, which has only been worsened by the fact that I am on a search committee for another C/P faculty member where colleagues espouse requirements for my job that I do not meet.

Ruth: My professional journey as a university professor began with a unique and experimental tenure-track position. The experiment was this: create a position dedicated to cultivating innovative teaching practices, engineering education research, and engineering outreach within the College of Engineering as a tenure-track faculty line, while not housing the position directly in any one of the existing college departments. While there were well-documented guidelines and policies for promotion and tenure as a whole, exactly how they would be applied to my case was also part of the experiment, and it did not end the way we all hoped it would. The takeaway being that I am no stranger to uncertainty, and I am also sensitive to the fact that good intentions are not enough to ensure good outcomes.

Our Analysis

Through analysis of our reflections and discussions, we sought to tease out the cultural shifts we were making as we transitioned from our prior professional careers into new roles. This report naturally focuses on areas of shared difficulty; it does not tell any one of our stories completely, nor does it represent our collective experience as a whole. We also want to contextualize the

following themes as an in-progress account of processes that have not yet reached their conclusion, and perhaps that is what makes these insights valuable. It can be difficult for someone who "knows how these stories go" to imagine themselves back at the beginning where there are still many possibilities ahead, on top of an unfamiliar set of rules to follow. Three main themes emerged.

Theme #1: What's My Role, Again? Adjusting to a New Kind of Ambiguity. Our initial discussions near the start of the term were often around one fundamental question: *What is my role here?* The versions of new faculty orientation we experienced at our prior institutions had been very thorough in addressing everything from performance expectations and review processes, to the nuts and bolts of teaching and classroom management. The orientation we received at Purdue was well-organized, but felt over-generalized by comparison. Specifically, there was an uncomfortable degree of open-endedness in the descriptions provided for what we were hired to do, and the process for evaluating how well we do it.

For example, during the orientation presentations, there was a brief mention that expectations for promotion for C/P faculty are different and typically based on some combination of *teaching* and *engagement* (also known by us as "some other thing"). In breakout sessions that followed, there were no explanations, descriptions, or examples of what engagement meant. Instead, the focus was on various aspects of grant writing and grant management coupled with the repeated message that right now, "our job" used in the general sense, was to establish and grow research programs. Questions loomed: *Was this meant for us as C/P faculty? How does this help us understand "our jobs" in the individual sense, when we were clearly not the target audience?* Over the next several weeks, answers to our follow-up questions were equally difficult to make sense of. Most, if not all, of our initial attempts to get more information about what our "some other thing" could or should be, even in the broadest sense, were met with some version of "it's up to you," "it's too early to tell," or "have you tried asking other C/P faculty to share their documents with you?"

The takeaway from this theme was our need to make two separate, but related, shifts. The first was transitioning from professional roles that were primarily defined by others, to roles that we are expected to be a more active participant in defining for ourselves. The second was transitioning from an environment where our most salient experiences with ambiguity came in the form of everyday problem-solving, to an environment where new ambiguity encountered in problem-*finding* was just as salient, if not more so.

Theme #2: Finding Our People, And More Unsatisfying Answers. Anyone who is, or has been, a member of a minoritized identity across one or more contexts can probably relate to the importance of connecting with *your community* in or around those contexts. Between the three of us, we are all white and two-thirds male, so the discovery of how much we needed to "find our people" was perhaps a bigger revelation for us than it might have been for others.

For context, there are only 25 (5%) C/P faculty throughout the College of Engineering at Purdue, distributed across 12 academic units. Within our departments, we were either the only or one of few C/P faculty, with no access to a well-established lineage of role models in positions like our own. As a result, the colleagues we turned to for guidance were mostly comprised of tenured

faculty, who also struggled to explain what exactly C/P faculty do, or how to translate generalized information (intended for a predominantly TT/T audience) to something applicable to our more unique roles. We understand this to be a direct result of our colleagues having limited experience working with and mentoring C/P faculty, and not a reflection of any failure on their part (we want to be very clear on this point). In either case, many questions were asked and the few answers we got were usually vague, tentative, hand-wavy, contradictory, elusive, and in short — frustrating.

So, naturally, we also sought the advice of other C/P faculty across campus. This is where we uncovered the true paradox embroiled in connecting with *our community.* For example, we set up a meeting with a senior-level C/P faculty-member with first-hand knowledge of the promotion process for C/P faculty at the university level. On the whole, our conversation was valuable in affirming that we were at least asking the right questions. However, when we expressed our lack of clarity around the process for promotion, the first response was to send us back to our departments for examples and written expectations. Our departments did not have examples and the written expectations were vague so we continued the conversation as follows.

> Q: "Can you tell us something about what a successful promotion package for a C/P faculty member typically looks like?"
> A: "Not really. They are all so different that there really is no typical."
> Q: "What about unsuccessful cases? What gets talked about as the reason(s) someone might not get promoted?"
> A: "Of the last set, they all went through, and overall, the success rate is typically very high."

This might be where we lose some folks. How is any of that a bad thing? It isn't, at least not when taken at face value. The problem is that it did little to illuminate any parts of the promotion process, that to us still seemed hidden, uncertain, and in some ways, inequitable. The "very high success rate" should have been reassuring, but instead seemed to activate various insecurities around belonging at Purdue and whether the move to this new more uncertain environment was the right choice. When these insecurities were most heightened, we seemed more inclined to interpret the guidance we were getting as inadequate at best, or recursive at worst. Interestingly, the process we adopted for reflecting on and talking through these frustrations also felt instrumental to eventually getting past them.

The takeaway from this theme, as the title of our paper suggests, was a shift that seemed to require time. Time needed to hear the vague "non-answer" less like evasion, and more like an honest attempt to prepare us for the realties that phrases like "you decide what that other thing will be" and "they are all so different, there is no typical" will likely entail.

Theme #3: Teaching Through Old Narratives in New Classrooms. Referring once again to the over-generalized feeling of our orientation, we were surprised by having no explicit or formal introduction to the policies and procedures of classroom teaching. Beyond these initial nuts and bolts issues, our discussions around teaching were often variations of two central sub-themes: (1) being a "good teacher" in classrooms that were bigger, or we had less agency in designing, and (2) respectfully teaching alongside colleagues whose pedagogical beliefs were in conflict with

our own. Neither of these have easy fixes, but the goal in our discussions, and for this paper, was not focused on solving these problems. Instead, we focused on drawing out the internalized narratives that created the conflicts in the first place.

"Good Teaching" Narratives. We often spoke about concerns on connecting with our students. The internal narrative driving the concern we identified was a belief that good teachers know all of their students' names within the first week or two of class, and they connect with each student on a personal level, or at least they try to. Similarly, we carried a persistent narrative that offloading our teaching responsibilities to graduate students was counter to good teaching and was equivalent to not caring about your teaching or your students. These differences in teaching narratives lead to a very real tension as we worked to update our definition of good teaching in a new context while aligning it with our own internal teaching philosophies. This tension comes partially from Purdue valuing "excellence at scale" while our prior institutions valued more personalized time-intensive practices that are impractical with large classes.

Teaching Alongside Colleagues. We also examined issues that arose from various teaching collaborations, exploring the intricacies of expertise, power dynamics, and personal relationships within these varied settings. One particular observation we made was how the implicit power dynamics between tenured faculty and NTT (regardless of rank) interact with the assumed attitudes toward teaching these roles also carry. Recalling an exam that had gone poorly in a team-taught course, one person assumed that the C/P faculty member involved was the teaching expert and, therefore, should be the one to tell the rest of the team how to proceed. Another person assumed that because a full tenured professor was also part of the team, there was no way a C/P faculty member would have enough authority for that to work. Neither of these assumptions are fair or ideal for creating the collaboration needed for a student-centered approach, but they are illustrative of how our assumptions and implicit biases, once expressed, can often work counter to our stated goals.

A Brief Comparison to the Literature

After reflecting on our own experiences, we were curious what research had described about the experiences and trajectories of C/P faculty roles. Researchers have noted the growth of NTT at universities across the country since at least the late 1990's [1], with NTT ranks making up approximately 20% of full-time faculty as of 2021 [2]. Undoubtedly, due to the increase in the number of NTT faculty, researchers have begun to document the experiences of these faculty members. Notable findings have included:
   1. NTT faculty often report feeling like second class citizens. [3,4]
   2. Promotion of NTT faculty can be difficult due to the inherent variation of their activities within their departments. [5,6,7]
   3. Despite some of these challenges, NTT are often satisfied with their jobs [4, 5].

Two relevant differences we noticed in our review first included that most of the research we came across was research about, but not by, faculty in NTT roles. The second was that while institutional policies did not always signal that NTT faculty roles were valued at the same level as tenure track counterparts, we want to emphasize that we, personally, felt valued in our relationships with colleagues. In addition, the stories and data shared in the literature regarding

the difficulties encountered with promotion resonated strongly with our initial experience of ambiguity in our C/P roles.

Lessons Learned – A Wish List Based on Our Collective Experience

Through our discussions, analysis, and reflections, we identified several areas where we believe our experiences could be a benefit to the faculty development community and broader audiences.

Onboarding – Even experienced teachers are learning new ropes. A common theme for us was wanting to have more basic information, earlier, and in a more structured format. This was a very pragmatic need for things like getting oriented with a new learning management system; understanding unit, college, and university-level policies; identifying tasks required of new instructors early in the semester. While we ended up finding answers eventually, it would have been helpful to have the information shared with us more directly and in a more organized fashion. This would have helped to reduce confusion and a sense of uncertainty about where in the organization to seek help. We did generally get this type of help at our smaller teaching universities, which highlights an element of the disconnect in our experiences here.

Onboarding – C/P faculty have unique roles; dedicated time to explain that would have helped. It would have been very helpful to have at least one specialized session during the orientation process that acknowledged and directly addressed the uniqueness of the C/P faculty role. This session would ideally be run by C/P faculty at associate and full levels, who are knowledgeable about C/P promotion procedures, and could explain what kind of time lines to expect and examples of "engagement" or other terminology used. As a rule of thumb, if it is a term that captures a lot of variation, assume no one knows what it means, including the folks who are supposed to know what it means. The ultimate goal would be to equip new C/P faculty with the knowledge and confidence to have productive conversations within their departments early and often.

The First Year – Being intentional about building community. We originally came together serendipitously at an orientation breakout session. It is not clear that any of us fully realized at that time how beneficial our collaboration would become. A significant part of our first semester transition into Purdue was the support we each experienced through conversation and camaraderie, reflection and learning, which all occurred as part of our informal cohort. In considering the value that emerged from this "accidental" grouping, we would propose that new C/P faculty are intentionally placed together in some form during the onboarding process.

As a first step, this could be linked to the new faculty orientation described above, to help build a sense among C/P faculty that there are others in their network who have similar questions and needs. To extend this idea, we also think that periodic discussion groups, specifically for C/Ps could be useful. Much of the authors' discussion during the first semester centered around trying to define the "other" (non-teaching) portion of our C/P roles. Having a dedicated group, facilitated by an experienced mentor to help new faculty explore this question would be beneficial, not only for individuals, but for the academic unit as a whole.

Conclusion

This project was important to us because it provided guidance to navigate and make sense of a significant, and stressful, time in our careers through a small cohort. Our goal in sharing these insights with the faculty development community will allow for new pathways to improve recruitment, onboarding, and retention of C/P faculty. We acknowledge the limitations of this work as a small data set and representing primarily the subjective experiences of the authors. While broad conclusions cannot be drawn, we expect these insights to be valuable to new C/P faculty, as well as their academic units.

Acknowledgement

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