

The Hidden Curriculum. Navigating Promotion and Tenure at University of Delaware

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I. Introduction

This paper reports on exploratory research that aims to support faculty as they navigate promotion and tenure (P&T) at the University of Delaware (UD). Results from a 2020 COACHE (Collaborative on Academic Careers in Higher Education) faculty satisfaction survey suggest a need for improved clarity surrounding P&T standards and expectations at UD. In addition, there is a body of literature that provides evidence for the idea that there is the hidden curriculum surrounding P&T. ‘Hidden curriculum’ refers to unwritten norms, practices, and expectations rooted in traditional routes to academic advancement. Much attention has been paid in the literature to the effectiveness of various types of mentoring in helping faculty navigate P&T [1] - [3]. We add to this literature by focusing on the role of pre-tenure peer reviews as mentoring opportunities. These reviews are often conducted in the third year and could serve as a mentoring moment to help faculty gain a deeper understanding of P&T standards, expectations, and where they stand in their progress toward tenure. To learn more about the effectiveness of these reviews in helping faculty prepare for P&T, we conducted semi-structured interviews with recently promoted (within the last three years) tenured associate professors at UD. Preliminary findings indicate unevenness across departments in terms of how pre-tenure reviews are conducted, their perceived purpose, and in the extent to which they helped clarify P&T expectations. Areas in need of improvement will be identified and lessons will be drawn from departments who are helping to demystify the P&T process. Results will be communicated to key stakeholders and will be used to make recommendations for improving the pre-tenure and P&T review processes at UD.

The rest of this paper proceeds as follows. Section II begins with brief institutional information that contextualizes our study. This is followed by background information to motivate the study, specifically a brief description of 2020 UD COACHE results that point to the need for greater transparency in P&T practices, and some literature on the hidden curriculum for P&T. Section III describes our research methods. Sections IV and V present and discuss key results, respectively. We conclude the paper (section VI) with thoughts on future related studies and with recommendations (appendix) based on our research results.

II. Background

Institutional Context and Faculty Satisfaction Survey Results

The University of Delaware is a mid-sized, R1 institution on the east coast. UD has invested heavily over the last two decades in STEM, and over half of the tenured/tenure-track faculty are in STEM [4]. So, although this research project applies to all UD faculty, engineering and related faculty are disproportionately involved and impacted.

UD has also been investing in improving departmental climates and diversity, equity, and inclusion on campus. As part of this work, in spring 2020, UD faculty participated in the COACHE Faculty Job Satisfaction Survey. This survey, developed at the Harvard Graduate School of Education, measures faculty perceptions of various aspects of worklife. Despite conducting the survey in spring 2020, a semester significantly disrupted by the COVID-19 pandemic, UD's survey response rate was 40%. COACHE determined that most responses were collected before the disruption and performed a special analysis to determine that the study was not substantially impacted by the start of the pandemic.

In this paper we will only discuss the aspect of the survey most relevant to our study -- policies and expectations surrounding P&T. Specifically, the survey asked faculty to evaluate the following aspects of P&T on a five-point Likert scale: clarity of the tenure process, clarity of tenure criteria and standards, body of evidence for deciding tenure, what it takes to achieve tenure, the process within the department, consistency of messages about tenure, whether or not tenure decisions are performance-based, and clarity of expectations surrounding teaching, research, scholarship, and so forth.

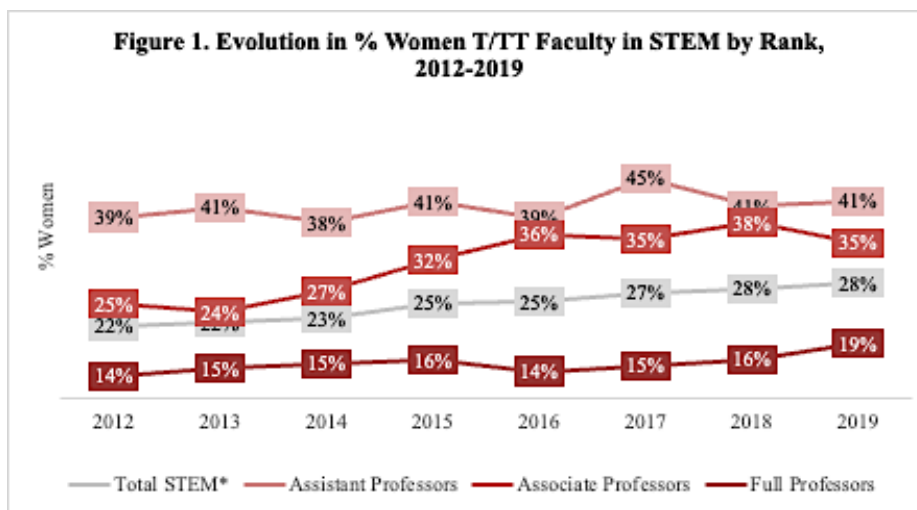
As is the practice with COACHE, UD received its survey results benchmarked against five peer institutions (selected by UD) and 110 cohort institutions who took the survey in the same three-year period. Benchmarking analysis showed that UD scored below its peer and cohort institutions on *all measures* related to P&T clarity. COACHE correspondingly identified "tenure expectations: clarity" as an area of concern at UD. Disaggregated data within UD show even lower levels of satisfaction surrounding clarity of P&T among women faculty and among underrepresented minority (URM¹) faculty. Women faculty perceive the P&T process, the criteria, and expectations as less clear than do men. Women faculty are also less satisfied with the consistency of messaging surrounding P&T than are men. URM faculty perceive the P&T process, the criteria, and expectations as less clear than do non-URM faculty. COACHE analysis does not provide intersectional information so we cannot report results, for example, on the perceptions of URM women faculty.

These disaggregated results are of particular concern because UD has made efforts in recent decades to diversify its faculty and enhance resources for faculty career development and success, in part through an NSF ADVANCE Institutional Transformation award (dates redacted in draft). During the grant years, the percentage of women faculty in STEM increased from 22% to 28%. An increase occurred at all ranks but was especially pronounced among associate professors where women represented 35% of faculty in 2019, up from 25% in 2014. See Figure 1, below. In addition, women across the university gained representation in leadership positions

¹ URM in this context includes faculty who are not white or Asian

between 2014 and 2019. Increases were especially notable among named professorships (where the number of women more than doubled), center directors, and STEM department heads.

Improvements in recruitment and retention of URM faculty have been more elusive. Black and Latino/a faculty are persistently under-represented at UD, making up 4 - 5% and 2% of the total population, respectively, of T/TT faculty since 2014 [5]. Additionally, a cohort analysis of faculty hired as TT assistant professors (2010-2012) reveals lower rates of tenure and promotion (57% vs 68%) and higher rates of attrition (43% vs 25%) among URM faculty [6]. Note: these data do not allow us to distinguish between faculty who were denied tenure versus those who chose to leave the institution. These results must be interpreted with caution, but we do believe that more work needs to be done to support URM faculty at UD.



The COACHE survey results described above are striking, but do not tell us exactly what or where the problems are. UD has written P&T guidelines at the department, college, and university levels meant to elucidate the processes (i.e., something of a formal curriculum for P&T). Yet, COACHE data suggest that these documents do not contain all of the information that faculty need to be satisfied with the clarity of P&T expectations at UD. Are unwritten rules and norms playing a role in the P&T process? If so, how are faculty learning about them? Our research explores this idea of a “hidden curriculum” related to P&T (described in more depth below) and seeks to understand how faculty get the information they need to be promoted/tenured successfully.

The Hidden Curriculum Surrounding the Promotion and Tenure Process

Institutions of higher education can be difficult to navigate due to a system of unwritten rules and informally transmitted institutional norms and practices, sometimes referred to as the “hidden curriculum” [7] - [9]. Research indicates that the promotion and tenure (P&T) process is no exception. P&T documents and guidelines are often circumscribed in terms of what is required to meet the standards for tenure and promotion [10] - [13]. They typically specify broad types of

evidence that can be used to demonstrate impact – such as publications, grant funding, presentations, excellent teaching evaluations, winning of awards – but leave many questions unanswered. How many publications? Which journals or presses are considered “top tier”? How much grant money am I expected to secure? Are all grant dollars created equally? How do I demonstrate excellence in teaching beyond the use of student course evaluations (which are often biased)? And so forth. P&T evaluation, on the other hand, often involves measuring a candidate against unwritten but tacitly understood answers to these and other questions. These unwritten but generally agreed upon norms – such as discipline-specific expectations in the number of and types of publications (e.g., books, journals, etc.), quality of journals or presses, and levels and types of grant funding expected for tenure – are what we mean by the hidden curriculum surrounding P&T.

One possible reason for circumscribed P&T guidelines might be to create room for different types of contributions to be recognized as valuable. There is significant variation (within and across disciplines) in the types of work done by faculty and in the associated standards of evaluation. For example, in some fields books are the gold standard but others emphasize blind peer-reviewed journal articles. Faculty in some areas stress the importance of solo authored publications whereas others emphasize large collaborative research projects. A potential upside to higher levels of generality is that it allows for greater flexibility and individualized evaluation in terms of the types of contributions one can make as an academic.

This type of flexibility is a good thing but the associated lack of transparency needs to be addressed by non-written means. Failure to do so can lead to psychological stress and feelings of pressure to “do it all” [12]. It can also lead to shifting standards and the possibility that two equally qualified candidates might be evaluated differently. This idea is supported by a large body of research indicating that bias in assessment is more likely in contexts where evaluation criteria are unwritten or loosely defined [14] - [16]. Finally, research indicates that uncertainty surrounding the standards by which one is being evaluated can lead to professional dissatisfaction and can (perhaps unnecessarily) complicate one’s ability to plan and present a compelling case for promotion [17].

There is debate about whether it would help to make written criteria and guidelines more comprehensive [18]. Alternatively (or in addition), departments can rely on various types of mentoring mechanisms as a means of clarifying the process. One such mechanism, which has received relatively little discussion in the literature, can be found in pre-tenure peer reviews. Many universities have a process by which faculty are reviewed on their teaching, research, and service, typically in their third year. Such reviews are often part of contract renewal. They can also be used to help junior faculty gain a deeper understanding of the P&T process and expectations and to get feedback on one’s progress toward promotion. Utilizing pre-tenure reviews in this way, has the advantage of providing a mechanism that falls outside informal channels of communication and is equally accessible to all.

Our research explores UD faculty members’ experiences preparing for P&T – and, in particular, whether pre-tenure reviews (which are conducted in years 2 and 4 at UD) were useful for clarifying P&T criteria and expectations. As an exploratory study, we are first trying to figure out where people are getting their information, and to identify areas that are working and areas in need of improvement. What can be learned from those who have had positive experiences navigating the P&T process? What changes could be made to align peer review more closely with P&T to provide faculty with this mentoring opportunity? We plan to follow up with more faculty interviews to learn more about whether and to what extent there are differences by race/ethnicity, gender, or discipline.

We note that our research does not take a stand on whether there should be a hidden curriculum in P&T. Our broad concern is if unwritten standards and norms are important in P&T, how do faculty learn what they are? Where do they receive their information? Is it more through formal structures such as peer review, or more through informal mechanisms? In future studies we hope to extend our work to explore more nuanced questions about departmental characteristics that influence faculty’s access to unwritten information, and whether factors such as gender, race/ethnicity, or discipline influence faculty’s experiences in navigating P&T.

III. Interview Study Methods

To address our research questions, we interviewed 12 faculty members from UD. This sample was generated by compiling a list of all recently promoted (within the last two years) associate professors at UD (2020, N = 28; 2021, N = 18). With an eye towards a sample balanced by race/ethnicity, gender, and discipline, we emailed a subsample of this group (N = 32). Demographics of those interviewed can be found below (Table 1). Seven of the twelve respondents were faculty in STEM fields.

Table 1. Interview Sample Demographics				
	Field	Year Promoted	Gender	Race/Ethnicity
R1	STEM	2021	Female	Asian
R2	STEM	2021	Female	Caucasian
R3	STEM	2021	Female	Caucasian
R4	Non-STEM	2021	Female	Caucasian
R5	STEM	2021	Female	Caucasian
R6	STEM	2020	Male	Multi/Black
R7	STEM	2020	Male	Caucasian
R8	Non-STEM	2021	Male	Asian
R9	Non-STEM	2020	Male	Hispanic
R10	STEM	2021	Female	Caucasian
R11	Non-STEM	2020	Male	Caucasian
R12	Non-STEM	2020	Female	Hispanic

Notes: The STEM signifier covers mathematics, engineering, and the physical, natural and health sciences. Non-STEM includes all other areas. Race/ethnicity and gender were self-reported.

Semi-structured one-on-one interviews were conducted in the Fall of 2022. Interviews ranged from 45-60 minutes and were conducted either in-person or over Zoom, based on participant preference. The interviews were audio recorded, transcribed using NVivo, with questions focused on faculty experiences with P&T, including open-ended questions about how faculty learned departmental P&T expectations, perceptions of clarity in both the P&T process and standards, resources used to navigate P&T, as well as experiences of 2- and 4-year peer reviews. Participants were asked to share positive and negative experiences, as well as identify any observed inconsistencies in feedback, documents, or other aspects of the process. Interviews concluded with feedback from respondents on ways to improve the P&T process at UD.

Data analysis began with line-by-line reviewing and cleaning of the transcripts, after which we wrote up case synopses outlining general themes and observations [19]. The development of preliminary codes was based on the literature and our research questions, with de-identified transcripts coded using a flexible coding approach [20]. Initial coding noted resources used to learn about P&T expectations, perceptions of clarity in the P&T process, experiences with 2- and 4-year peer reviews, and the role of these reviews in preparing for P&T. A second stage of coding relied on inductive coding techniques to identify emergent codes from the interview text [21]. The authors discussed these emergent codes to ensure consistency. After generating theoretical categories, or pattern codes, we went back to the data to look for variation across cases.

For this stage of the research project, we report on broad themes that capture common experiences across our respondents. Given the small sample size, we were not able to identify differences in experience based on gender, race/ethnicity, or research discipline. Future phases of this research will use strategic sampling to assess whether factors such as race/ethnicity, gender, or non-US doctoral training shape faculty experiences of P&T.

IV. Findings

As discussed earlier, this project is framed around the idea that there is a hidden curriculum in the P&T process. Prior research (cited above) suggests that this is the case at other institutions. The questions at hand are to what extent (if any) is there a hidden curriculum in the P&T process at UD and how do faculty go about learning the tacit norms that make up this curriculum? In particular, to what extent do pre-tenure peer-reviews support faculty as they work to gain information about unstated norms and expectations?

Our interviewees reported a wide range of experiences with pre-tenure review and P&T, but some similarities became evident as we coded the data. In what follows, we first establish preliminary indirect evidence for the presence of the hidden curriculum at UD. This is followed by a discussion of whether and to what extent pre-tenure peer reviews help faculty members learn some of the unstated details. We conclude this section with observations about the impact

of the hidden curriculum on faculty. In particular, we find that it creates undue stress that may be compounded for those faculty whose research area falls outside what is typical in their departments.

Hidden Curriculum

Our interviews suggest that both written and unwritten standards play a role in UD's P&T process. The written standards (along with process information such as timeline) are found in the P&T documents. When asked about the clarity of these documents, nearly all interview subjects reported that they are easy to find and often easy to read and comprehend. However, most subjects indicated that the documents are not sufficient for understanding the expectations for promotion. For example, a female STEM faculty member stated of her departmental document:

“I did not find it to be very clear. If I remember correctly, I mean, our document has been updated since I joined in 2015. I don't remember which year, but basically it's, you know, you have to reach excellence. And so there's a word. But what that actually means is not very clear.” [R10]

Similarly, after noting that the department document is clear about the process, a male non-STEM faculty member commented that it lacks details regarding standards.

“I know I have... a research expectation like publications, but there is no... strong or a clear take “if you publish like two or three top tier journals you definitely get tenure” ... it is more ... vague in terms of, you should achieve excellence in research, that type of thing.” [R8]

In both examples, the written standard is excellence (e.g., in research). What is unwritten is the meaning of “excellence” in the context of the review -- the type or level of achievement that would make for a successful promotion case. This is part of the hidden curriculum as we are using the expression.

We know from prior research on the hidden curriculum in P&T that guiding documents tend to provide only broad standards and leave many specifics unstated (e.g., numbers and types of publications, etc.) [10] - [13], so the above types of comments are not especially surprising. Among our interviews, there is even an example of a department that revised its documents from more specific to less specific in order to allow more flexibility in terms of how to measure impactful work. This example comes from a female non-STEM faculty member [R5], who said that her department guidelines were “changed from specific numbers to a more generic, you know, ‘excellent’ wording that was not tied to numbers”.

Contrasting with the above examples, a small number of interviewees expressed that their departmental guidelines helped them gain a better understanding of research expectations. For example, a male non-STEM faculty member stated:

“I actually think ours are pretty clear because they actually set a sort of minimum number of publications required.” [R11]

Likewise, a female non-STEM faculty member [R4] indicated that her documents had been recently revised to provide more clarity – for example in terms of “what constitutes a high visibility activity in this area and so on.” R9, who is in the same department, made similar comments.

It appears from the quotes above that the faculty interviewed often associate clarity of P&T standards with explicit metrics such as number and type of publications, etc. In other words, documents are more clear if they indicate not just the level of achievement expected (excellence), but specific examples or measures of how this achievement might be demonstrated. But because this level of detail is rarely included in guiding documents, perhaps more important is the question of where faculty learn the unstated expectations or standards. This is what we report on next.

Peer Review as a Resource for P&T

The pre-tenure peer review process is a formalized mechanism that provides an opportunity for faculty to gauge their progress towards tenure. As such it is a place where you might expect unwritten norms to be taught. To learn more about whether and to what extent this might be the case at UD, we asked interviewees a series of questions about their experiences with the 2- and 4-year peer-review processes. What materials were you asked to submit? Did you receive mentoring along the way? What type of feedback did you receive at the end of the process? Was one or both of the 2- and 4-year reviews helpful in preparing for tenure?

We found that the pre-tenure reviews at UD can be useful for professional planning. For example, when asked about the usefulness of 2- and 4-year peer reviews in preparing for P&T, a female STEM faculty member [R1] said she received corrective advice on her CV during her two-year review. A female non-STEM faculty member stated:

“I think it just definitely gave me a good timeline kick off. ... How to fit in, this particular high visibility activity... when that is going to happen and really take some steps towards making that happen... Helped me kick into gear or some of the activities that I had planned, but hadn't acted on yet.” [R4]

R10, a female STEM faculty member, similarly expressed that her pre-tenure reviews helped her establish an important professional skill:

“So, learning that I should be doing this record keeping early was the one thing that I got out of it early.” [R10]

This same faculty member found her two-year review helpful in clarifying how she should be spending her time (i.e., less on service):

“I knew I was doing too much service, but it was also nice to get to know that the committee recognized that too. And to kind of say, you know, it's OK to step back from some of this.” [R10]

But we also found that, for the majority of subjects, the pre-tenure reviews were by and large not serving to clarify the tacit evaluation norms that make up the hidden curriculum. In most cases, the materials requested for peer review tended to be minimal, generally no more than a C.V. and brief research, teaching, and service statements. Several subjects wished they'd been asked to prepare more materials for review in year four and were surprised by how much more was expected for tenure review. As one respondent put it,

“I would say that there's a lot of gap between what I turned in for peer eval and what I turned in for the final dossier.” [R1]

Another discussed how unprofessional her four-year review materials appeared to her after she had successfully gone through tenure review. Commenting on her research statements, which were in the form of lists, and not the comprehensive narrative expected for tenure review:

“It was more of like checking the boxes, like, I published this paper and that paper. And it wasn't like, this is who I am as a researcher. And so my research program has grown, which is apparently, what I should have done. But I was just like, here's my update. Kind of horrifying to think about.” [R3]

Likewise, a female STEM faculty member reported that the materials she submitted for peer review were not at the level that was expected for tenure review, which decreased the usefulness of the peer review. In her words:

“.... I looked at those [peer-review] statements, I was like, OK, these need to be improved. These need to be a lot better than they are. This is just sort of this list of, like, various things you've done as opposed to, like, telling your story a little bit. I don't know that [the peer review] really prepared me for anything. No, I felt like my tenure stuff was, like, a whole another step in its own right.” [R2]

Peer-review committee feedback was often minimal as well. Several faculty reported that official letters were often generic and positive (“Keep up the good work!”), and under-reflected what would be needed for tenure and promotion. R10 speculated that committees try to be positive in their official letters because the letters stay in the candidate's record, and are included in their P&T dossier.

A female non-STEM faculty member received a positive official letter from her committee, but was also told in a side conversation with faculty from her department that changes were needed. In her words:

“The official letter is really positive and praiseworthy, and the summary is: “continue doing what you're doing.” So, reading that, I don't think it's particularly useful. Because I think it leaves no room for improvement, which now I know is expected.” [R12]

It is important to note that some interviewees did receive valuable mentoring during their peer reviews. A male, non-STEM faculty member received helpful feedback both in his official letter and informally through conversation. He stated:

“The [peer review] letter definitely said something about [needing more] sole authored publications..and it did talk about editorial board service.” [R11]

But other other norms were not conveyed through the letter. He went on to say:

“It didn't say anything about the publishing with my advisor [being discounted], I had picked that up through more informal channels.” [R11]

To summarize our findings on peer reviews, some of our interviewees found pre-tenure reviews helpful in small ways, such as establishing good working habits early in their careers. A few found them helpful in clarifying unwritten standards or norms related to P&T. However, a majority of our interviewees did not find these reviews helpful in inculcating them into the departmental norms and practices surrounding P&T. In the appendix at the end of this paper we apply these findings in recommendations for making peer reviews more productive mentoring moments for junior faculty as they navigate the tenure track.

Other Resources

A majority of our interviewees did not find pre-tenure reviews helpful in coaching them through the hidden curriculum of P&T. Yet, all were successful in their promotion and tenure cases. Where, then, did they learn about unwritten standards and norms? What mechanisms did they find most useful? Here we briefly overview example responses to these questions.

R8 was mentored to look at previous successful cases to get a better idea of numbers and tiers of publications in his discipline. (In fact, close to all interviewees looked at colleagues' P&T materials to help them prepare.) R5 learned implicit standards in her first year during departmental discussions surrounding document revisions. R9 was provided a “career advisory team,” who did an excellent job at helping to clarify the standards. R10 learned about P&T expectations through serving on the department P&T committee as junior faculty. She explained:

“I think it was before my two-year review, and it was suggested at the time to serve on [the P&T committee] so that you could see what the process was like...so that I found helpful, but I also found it quite stressful to see it on the other side, too...You weren't a voting member of the P&T committee, but you helped write the letters, you helped with the conversations, you reviewed dossiers and things like that. So that was a helpful process to go through.” [R10]

Faculty tend to find the resources they need to make it through the promotion and tenure process in a variety of ways, even when their departments don't provide formal support. But, at what cost? This is the topic of the next section.

Faculty Stress Around Promotion & Tenure

As demonstrated above, we find little evidence that the peer review process clarifies the unwritten rules and departmental norms around tenure. One outcome of the hidden curriculum is pressure on junior faculty to continually do more, particularly with regard to research, where ideas of excellence encompass measures of productivity and impact. For many of our respondents, this uncertainty led to pressure to overperform, as a way to hedge against failing to meet the bar. In reflecting on their pre-tenure experiences, several respondents reported that they had in fact over-prepared. When asked if they had a sense of what the expectations were for tenure review, respondents replied:

“No. I always felt like you could just keep doing more. I never had a good sense of ‘this is enough.’” [R10]

“It's also very unclear what excellent means. And there was never any attempt to try to put a number on it, which is fine. But then you still don't know if what you're doing is sufficient..” [R3]

In striving for excellence, faculty reported prioritizing their professional role, whether this meant decisions to be “thoughtful on family planning” at the pre-tenure stage [R2], to continual overwork and years of operating in a “panic mode. [Constantly asking myself] am I doing enough? Am I doing enough?” [R1]. Almost the entire sample commented that the experience was needlessly stressful, leading to negative outcomes like exhaustion, feelings of being overwhelmed, and burnout:

“I checked every little box... [and] burnt myself out, so I would recommend [to] others to not do what I did because I think I [might] have gone two steps over.” [R1]

Some participants described the process as demoralizing and a small number reported mental health concerns. R8 shared that even after aligning his work to reflect his interpretation of tenure expectations, as well as following advice from his 4-year peer review, he still didn't feel

confident in securing tenure. After turning in his P&T dossier, his mentor suggested it was finally time to relax and await the result. As much as this faculty member wanted to heed his mentor's advice, he could not: "But relax was the last thing I could do. Even after submitting the package I was super nervous and I didn't want to talk to many people" [R8]. Throughout his interview, R8 reported the tenure process causing years of stress, ultimately taking a toll on his mental health and leading him to socially isolate from colleagues.

Experiences of stress and feelings of overwork were common across the faculty we interviewed. As described above, lack of clarity around tenure expectations contributed to faculty feeling pressure to continually do more as a means to guard against failing to meet tenure standards. While nearly all of our participants noted some level of stress in navigating the P&T process, there was considerable variation in experience. Our research was not designed to capture every factor that might plausibly contribute to this variation, nor to gauge which factors matter most. However, through the inductive coding process, we found preliminary evidence to suggest faculty "fit" within their department is one aspect that deserves more careful attention in subsequent research. Faculty who felt they didn't quite fit within their department's research profile had distinct and perhaps more negative experiences because of being outside departmental and disciplinary norms. As we describe below, a lack of fit complicates navigation of the hidden curriculum and the P&T process.

In several cases, these issues arose when a subject's research was interdisciplinary or non-traditional (outside the norm) within their department. This is worth noting as research at UD is becoming more inter- and multidisciplinary, and faculty appointments are being split between departments and sometimes across colleges. One subject [R3], whose quote above expresses her uncertainty about the meaning of excellence, does research that falls outside the norm in her department. She commented:

"I'm in an interdisciplinary field ... So I knew that I was going to have to work harder and that I was going to have to explain myself." [R3]

She goes on to note the tension of being in a research field that is distinct from that of her colleagues and whose norms are not in alignment with the traditional tenure expectations in her department. She expresses gratitude to the external letter writers who supported her tenure case and commended her for continuing to try to get grant funding in a field where funding is generally not available:

"So I was given information that you give to junior scientists [to secure external funding], but without really any knowledge about the upstream struggle in my field to get these kinds of funds. ... I was very, very clear in my promotion and tenure documents about how I was advised to do this. I continue to pursue extramural funding. And so bless the external [letter] writers in my field. 'It's commendable that despite the severe lack of funding and the lack of

expectation that external funding will be received in this field, that [name] continues to apply for these grants...” [R3]

Another subject whose research is interdisciplinary reflects on his difficult experience with tenure review:

“The complication for me was that my research spans two fundamental fields of study... [S]o I had to seek feedback on both sides...in terms of the [first field of study] world, how am I doing? in terms of [second field of study], how am I doing?.. [T]he issues I had [with P&T] were related to that. How you’re reviewed when you’re interdisciplinary is a headache.” [R7]

As R7 illustrates, faculty with interdisciplinary research are often evaluated by faculty across two departments and must uncover the hidden curriculum in both. In other cases, faculty are expected to meet tenure expectations that may be perfectly reasonable to faculty doing core research within the discipline, but less appropriate or attainable for faculty whose research includes topics or methods outside of disciplinary norms. This is further complicated with the increased reliance on metrics in faculty evaluation, as more limited funding opportunities and publication outlets with lower impact factors may lead to nontraditional research being undervalued in P&T processes.

We found faculty facing challenges of “fit” used a number of strategies to successfully navigate P&T. In some instances, such as R1, faculty deciphered aspects of the hidden curriculum relatively early in their tenure clock and could respond by attempting to meet expectations for both their own subdiscipline and that of the broader department, often through overwork. In other cases, such as R3, the hidden curriculum was not apparent early in the process, but after a negative experience in the 4-year peer review she realized that colleagues in her department weren’t familiar with the standards for her field. As described above, R3 then ramped up work to connect with senior scholars in her field, with particular attention to cultivating a network of possible external letter writers. In her assessment, her P&T case went better than her 4-year review due to the value of these external letters, which helped the departmental colleagues voting on her case understand the value of her work. R12 used a similar strategy, choosing to get advice from colleagues outside her department whose research was more closely aligned with her own.

V. Discussion

In summary, our findings suggest that UD is by and large not taking advantage of the opportunity to use peer review as a meaningful mentoring moment for faculty. It is being used, instead, more as a procedural activity linked to faculty contract renewal than to faculty development. Moreover, there are few formal structures in place to help faculty understand the “unwritten rules” associated with tenure review. Mentoring received by our interview subjects was almost exclusively self-initiated. This system protects the hidden curriculum and

disadvantages faculty who lack access to informal networks where P&T standards may be more clearly communicated.

Our findings have implications for the broader literature on faculty career satisfaction and faculty retention. Individuals enter into faculty roles with expectations about their employment within the institution, including a fair tenure process, equitable rewards, access to the resources needed for professional success, and collegial or even collaborative relationships with colleagues [22]. These expectations and norms are largely unwritten and unspoken, making up a “psychological contract” between faculty and their respective departments. Research has found these faculty expectations being unmet can lead to professional dissatisfaction and contribute to faculty decisions to leave the institution [23]. Based on our findings, the toll that the P&T process took on our interviewees may similarly contribute to faculty dissatisfaction and subsequent turnover. These negative outcomes are not necessarily short term problems. Stressful and unpleasant experiences that occur during P&T can have impacts on faculty satisfaction that persist long after the tenure decision, damaging professional relationships and contributing to long-term faculty disengagement [24]. Our findings suggest that the hidden curriculum disadvantages faculty as they prepare for promotion and tenure, leading to unnecessary stress that may contribute to faculty turnover and faculty disengagement among those that remain at the institution.

VI. Conclusion

We plan to follow up on this exploratory research project with further interviews based on what we have learned so far. Findings and recommendations (see appendix below) will then be disseminated to key stakeholders (e.g., faculty senate, deans, and provost’s office) with an eye towards collaborative implementation of change. We also plan to survey faculty outside our institution to learn more about faculty experiences with P&T and the hidden curriculum.

In particular, we hope to be able to say more about differences in faculty experiences based on race/ethnicity, gender, or nationality. For example, our findings so far raise the possibility that high levels of stress surrounding lack of clarity as well as a propensity to over-prepare was experienced more by female and/or non-white faculty. Some even indicated a perception that their race/ethnicity or gender contributed to negative experiences going through P&T. The sample also consisted of a smallish subgroup of international faculty. We observed that those faculty were less familiar with U.S. standards and norms surrounding P&T. Given the current sample size, more research is needed before we can know whether and to what extent race, ethnicity, gender or international status might be part of the story.

Finally, we acknowledge that the sample of faculty are all people who were successfully promoted. It would be interesting to learn more about faculty who have either opted out or have been denied, but due to difficulties with obtaining such data this is beyond the scope of our existing iterative research project.

Appendix: Recommendations

As noted earlier, a key finding is that there is a significant amount of inconsistency – between departments, between written and spoken guidelines, and between reviews (peer reviews and tenure) in the promotion and peer evaluation processes. Based on our findings, we have developed recommendations that we believe will help shore up these inconsistencies, demystify P&T, promote fair access to information for all faculty, and reduce some of the negative consequences of the hidden curriculum. Our recommendations primarily focus on structural change, namely, revising the peer-review process to be a robust mentoring opportunity. We emphasize structural change because this helps all faculty equally and reduces reliance on informal networks and institutional memory. We end our recommendations with some suggestions for improving mentoring. We do not place significant emphasis on mentoring as a solution because of the shortcomings discussed above with respect to mentoring at UD and the potential for bias to play a role in limiting some people’s access to quality mentoring [25]. However, we hope that our suggestions reduce observed problems.

To start, we recommend treating peer review as something of a “practice P&T,” with policies and procedures aligned more closely with those used in tenure review. We do not take this suggestion so far as to recommend involving external letter writers, but the internal process could more closely mirror tenure review processes within departments. Our specific recommendations for *reducing inconsistencies* and bringing peer-review practices closer to P&T include:

1. Developing university-level written descriptions of the materials to be submitted for peer review. Our research revealed significant inconsistency in what was required from department to department. If the peer review required more of a “mini-dossier,” faculty would be better prepared when assembling their full dossier for tenure review. They would also then be evaluated based on a more complete picture of their work and achievements.
2. Developing written guidelines for the peer-review process within all departments. While our review of departmental documents revealed that some departments already have such guidelines, approximately half do not. For those who do have such guidelines, they may want to make revisions in alignment with other recommendations in this paper. Guidelines don’t need to be over specified in terms of criteria (e.g., number of publications, etc.), but should be clear enough that the candidate and department understand the timeline, process, and the materials to be reviewed. Written guidelines are important because they are equally available to all faculty. They reduce the reliance on verbal guidance, which can be inconsistent from person to person and places a high burden on institutional memory.
3. Ensuring that written guidelines surrounding peer review and P&T are consistent across documents (departmental, college, university) and are consistent with departmental norms.

This would reduce the confusion and anxiety that can arise from written inconsistencies and when spoken advice from senior colleagues conflicts with written documents.

Further recommendations for *improving the peer review process* to make it a mentoring moment and to demystify the hidden curriculum include:

4. Reducing the number of pre-tenure peer reviews to a single review in year three. We believe a high-quality review in year three will be more useful than reviews in year two (which many consider too early for useful feedback) and year four (when it is often too late to make significant changes). Feedback from interviewees on how to improve the process support this recommendation.
5. Considering whether peer review letters should be included in P&T dossiers, as is required by current policy. We speculate that committees may hold back on putting substantive feedback in writing for fear of harming the candidate during tenure review. Allowing peer-review letters to stand alone and not be made part of tenure review may encourage more honest and helpful feedback.
6. Developing effective mechanisms for supporting faculty whose research discipline and/or workload falls outside of department/college/university norms.
7. Developing training and resources to support mentoring of faculty based on departmental peer review and P&T documents as well as mentees' assigned workloads (because all UD reviews are based on assigned workload, per policy).

References

- [1] L. Ponjuan, V. M. Conley, and C. Trower, "Career Stage Differences in Pre-Tenure Track Faculty Perceptions of Professional and Personal Relationships with Colleagues," *The Journal of Higher Education*, vol. 82, no. 3, pp. 319-346, May/June 2011.
- [2] R. E. Zambrana, R. Ray, M. M. Espino, C. Castro, B. D. Cohen, and J. Eliason, "'Don't Leave Us Behind': The Importance of Mentoring for Underrepresented Minority Faculty," *American Educational Research Journal*, vol. 52, no. 1, pp. 40-72, Feb. 2015.
- [3] D.F. Zellers, V. M. Howard, and M. A. Barcic, "Faculty Mentoring Programs: Reenvisioning Rather Than Reinventing the Wheel," *Review of Educational Research*, vol. 78, no. 3, pp. 552-588, 2008.
- [4] University of Delaware Institutional Research and Effectiveness, "Office of Equity and Inclusion Annual Report: Faculty by Department, Gender, and Primary Ethnicity," 2022. [Online]. Available: <https://bpb-us->

w2.wpmucdn.com/sites.udel.edu/dist/e/2019/files/2023/02/OEI-Fall-2022-Report-Faculty.pdf [Accessed April 7, 2023].

- [5] University of Delaware ADVANCE Institute, "UD Faculty Diversity Fall 2021," 2022. [Online]. Available: <https://bpb-us-w2.wpmucdn.com/sites.udel.edu/dist/2/11245/files/2022/07/ADVANCE-Report-Fall-2021-digital.pdf>. [Accessed April 7, 2023].
- [6] University of Delaware ADVANCE Institute, "Tenure & Promotion Processes at UD: Examining Patterns Among Women and URM Faculty," 2022. [Online]. Available: <https://bpb-us-w2.wpmucdn.com/sites.udel.edu/dist/2/11245/files/2022/05/Cohort-Study-Final-April-26-2022.pdf>. [Accessed April 7, 2023].
- [7] I. Villanueva, M. Di Stefano, L. Gelles, and K. Youmans, "Hidden Curriculum Awareness: A Comparison of Engineering Faculty, Graduate Students, and Undergraduates," *World Education Engineering Forum*, Albuquerque, NM, 2018.
- [8] J.M. Calarco, *A Field Guide to Graduate School: Uncovering the Hidden Curriculum*. Princeton, NJ: Princeton University Press, 2020.
- [9] E. Margolis, *The Hidden Curriculum in Higher Education*, New York, NY: Routledge, 2021.
- [10] R. Rice, M.D. Sorcenelli, and A. Austin, *Heading New Voices: Academic Careers for a New Generation*, Washington, DC: American Association for Higher Education, 2000.
- [11] L.C. Windsor, K.F. Crawford, and M. Breuning, "Not a Leaky Pipeline! Academic Success is a Game of Chutes and Ladders," *PS: Political Science & Politics*, vol. 54, no. 3, pp. 509-512, 2021.
- [12] L. Cate, L.W.M. Ward, and K.S. Ford, "Strategic Ambiguity: How Pre-Tenure Faculty Negotiate the Hidden Rules of Academia," *Innovative Higher Education*, vol. 47, pp. 795-812, 2022.
- [13] N.A. Mitchell and J.J. Miller, "The Unwritten Rules of the Academy: A Balancing Act for Women of Color," *Diversity in Higher Education*, vol. 10, pp. 193–218, 2011.
- [14] W.G. Tierney and E.M. Bensimon, *Promotion and Tenure: Community and Socialization in Academe*, Albany, NY: State University of New York Press, 1996.
- [15] B. Resnik, "Including Mechanisms in Our Models of Ascriptive Inequality," *American Sociological Review*, vol. 61, no. 1, pp. 1-21, 2003.
- [16] M.E. Heilman and M.C. Haynes, "Subjectivity in the Appraisal Process: A Facilitator of Gender Bias in Work Settings," in E. Borgida and S. Fiske, Eds., *Beyond Common Sense*. Cambridge, MA: Blackwell Press, 2008, pp. 127-155.
- [17] M.F. Fox, "Gender and Clarity of Evaluation Among Academic Scientists in Research Universities," *Science, Technology, and Human Values*, vol. 40, no. 4, pp. 487-515, 2015.
- [18] K.S. Helgesson and E. Sjögren, "No Finish Line: How Formalization of Academic Assessment Can Undermine Clarity and Increase Secrecy," *Gender, Work, and Organization*, vol. 26, pp. 558-581, 2016.
- [19] M.B. Miles, and M. Huberman, *Qualitative data analysis: An expanded sourcebook*. Sage, 1994.

- [20] N. Deterding and M. Waters. "Flexible Coding of In-Depth Interviews: A Twenty-First-Century Approach," *Sociological Methods & Research*, vol. 50, no. 2, pp. 708–39, 2021.
- [21] C. Kathy, *Constructing grounded theory: A practical guide through qualitative analysis*. Sage, 2006.
- [22] J. H. Lawrence, S. Celis, and M. Ott, "Is the tenure process fair? What faculty think," *The Journal of Higher Education*, vol. 85, no. 2, pp. 155-192, 2014.
- [23] K. O'Meara, J. C. Bennett, and E. Neihaus, "Left unsaid: The role of work expectations and psychological contracts in faculty careers and departure," *The Review of Higher Education*, vol. 39, no. 2, pp. 269-297, 2016.
- [24] T. A. Huston, M. Norman, and S. A. Ambrose, "Expanding the discussion of faculty vitality to include productive but disengaged senior faculty," *The Journal of Higher Education*, vol. 78, no 5, pp. 493-522, 2007.
- [25] M. Corneille, A. Lee, S. Allen, J. Cannady, and A. Guess, "Barriers to the Advancement of Women of Color Faculty in STEM: The Need for Promoting Equity Using an Intersectional Framework," *Equality, Diversity, and Inclusion*, vol. 38, no. 3, pp. 328-348, 2019.