

How to Promote Faculty Advancement for Nontenure-track Faculty

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How to Promote Faculty Advancement for Non-Tenure-Track Faculty

Abstract

Institutions of higher education are increasingly relying on non-tenure track (NTT) faculty to support teaching needs and service duties such as directing undergraduate programs. Academics have expressed a variety of concerns about this shift in hiring practices, many of which have focused on difficulties faced by part-time and adjunct professors. This paper will focus on a somewhat different, more recent, trend. A growing number of universities have established full-time renewable NTT positions with an array of titles and ranks. Research done at the University of Delaware (UD) – in the form of a full-time faculty climate survey – indicate high levels of job satisfaction among their NTT continuing faculty. That said, there are a number of challenges that need to be addressed in terms of workload, fair promotion practices, and equal access to effective formal mentoring. This paper will focus on what has been done at UD – and what else needs to be done – to support faculty development of its NTT faculty. It will also report on other institutions that are working to carve a place in academe for a new type of faculty position – one that deserves equal access to many of the benefits enjoyed by tenured and tenure-track faculty.

Introduction

The number of faculty positions off the tenure track at U.S. colleges and universities has been for decades growing at a faster rate than the number of positions on the tenure track. As a result, between 1995 and 2011, the proportion of tenured/tenure-track (T/TT) faculty positions at 4-year institutions in the U.S. dropped from around 53% to 39%. During this same time, the proportion of faculty positions off the tenure track grew from around 47% to 61% [1]. This trend is notable because of the potential ramifications for higher education, some of which are related to working conditions for faculty off the tenure track. For example, many non-tenure-track (NTT) faculty are hired on a per-course basis with little to no job security, low pay, and limited access to resources such as office space [1]. Yet, NTT faculty teach over 50% of the student credit hours at 4-year institutions in the U.S. [1]. It is clear that NTT faculty play a significant role in fulfilling the educational missions of U.S. institutions of higher education in spite of sometimes difficult working conditions.

In part because of these concerns, a growing number of universities have established full-time, renewable NTT positions (some examples include Carnegie Mellon University, Michigan Tech, Pennsylvania State University, Temple University, University of Delaware, University of Denver, University of Michigan Ann Arbor, University of Virginia, Washington University) [2]-[8]. It is this population of faculty that we address in this paper. This type of faculty track goes by different names at different institutions. ASEE has referred to it as “professional track.” Professional-track faculty have varied duties and responsibilities, although many specialize in

teaching and have the majority of their workload in teaching [9]. Some also do service and some research and not all have teaching as their primary duty.

In U.S. engineering schools, a relatively small percentage (17.8%) of faculty positions are off the tenure track [10]. However, some engineering schools have started to recognize the benefits of hiring and supporting full-time NTT faculty, many of whom focus on teaching. For example, at our institution, the University of Delaware (UD), in the College of Engineering (COE), NTT faculty account for 16% (N=28) of the full-time faculty. Yet, in the calendar year 2020, these NTT faculty taught 37% of the student credit hours in the college [11]. At UD COE, full-time NTT faculty hold leadership positions, for example, director of undergraduate programs or overseeing ABET accreditation. These faculty play a critical role in the education of engineering students and in the operations of the department and College.

The working conditions for professional-track faculty, as well as benefits, and professional privileges, tend to vary from institution to institution. Examples of factors that can vary include titles (e.g., lecturer vs. instructor vs. professor), existence and clarity of promotion paths, inclusion in faculty governance at all levels, representation by faculty unions, eligibility for parental leave, length of contracts, and resources and opportunities for professional development. In recent years a number of universities have codified processes and policies that strengthen the standing of professional-track faculty on their campuses [2]. These actions have the potential to improve work-life conditions and career satisfaction for professional-track faculty. Because career satisfaction is linked with faculty retention and advancement [12], these actions are an investment into the future for institutions wishing to hire, develop, and retain strong faculty.

Recent publications have described initiatives and programming intended to improve career satisfaction for professional-track faculty [2], [4], [5], [9]. With this paper, we aim to contribute to the dialog through a research project on faculty satisfaction that identifies factors related to professional-track faculty career satisfaction. Understanding these factors will help institutions target initiatives designed to foster professional-track faculty retention and success.

Continuing-Track Faculty at the University of Delaware

Our research study was conducted at our home institution, the University of Delaware. UD has a full-time NTT faculty track known as the “continuing track” (CT). (It used to be called CNTT—continuing non-tenure track—but as at other schools [13], the name was changed to define faculty by what they are rather than what they are not.) CT faculty positions are funded by the university and are distinct from research professor positions, which are often temporary soft-funded. They are also distinct from adjunct faculty positions, which tend to be contracted semester by semester. In contrast, CT contracts have lengthier terms of 2-5 years, depending on years of service. Of UD’s ~1300 full-time faculty, roughly a quarter are CT [14].

UD is one of the institutions that have formalized career-development processes for full-time NTT faculty in recent years. In spring 2014, in part due to UD's growing population of CT faculty, UD's provost assembled a commission to study issues surrounding CT faculty. The commission held stakeholder meetings and open listening sessions. They conducted a faculty-wide survey to learn more about the experiences of CT faculty and the views of all faculty on how employment and career-advancement practices for CT faculty ought to be codified. After completing the study, the commission issued a series of recommendations concerning CT faculty titles, contract renewals and promotions, and mentoring [15], many of which were adopted in some form by the university.

As a result, in many ways CT faculty positions are similar to T/TT positions. CT faculty members with terminal degrees in their fields hold professorial titles. Those without terminal degrees hold instructor titles. There is a codified promotion process for CT professors and instructors that mirrors the tenure and promotion processes for TT faculty (described in greater detail on pages 6-7). CT faculty serve on the Faculty Senate. They are protected by the faculty union collective bargaining agreement, which includes minimum salary levels by rank. CT faculty are eligible for sabbatical according to the same rules as T/TT faculty. In many departments CT faculty participate on committees and in departmental decision-making. Although CT faculty members are not eligible for tenure, their jobs are generally quite secure. In fact, the 2015 report of the provost's commission on CT faculty [15] refers to CT faculty members as "*continuing permanent* faculty." CT faculty can lose their positions for cause, but as long as the faculty member performs at the expected level, their contract will generally be renewed. This job continuity is important because it allows for career and professional development, which benefits not only the CT faculty but also their students and the University.

While improvements have been made in the working conditions for CT faculty on our campus, challenges and inconsistencies remain with respect to their experiences and status. One of the reasons is that there is no unified description of a CT faculty position. CT faculty serve in a variety of capacities that support the mission of the University. Most have teaching as the majority of their workload, while others have service. Some CT faculty members have some research or scholarship in their assigned workload, and others don't. As referenced earlier, in UD's College of Engineering, CT faculty on average teach more, and larger, classes, than do COE T/TT. However, not all engineering CT faculty have teaching as their primary job duty. As in other UD colleges, job descriptions and experiences within the departments vary from person to person, depending on factors including formal workload assignment, when they were hired, departmental policies and norms, and chairperson. This diversity of job descriptions and workload for CT faculty at UD is a theme that we will return to later.

It is important to understand the experiences of CT faculty to make improvements in their career satisfaction. Career satisfaction is linked to higher retention rates and advancement through the faculty ranks [12]. UD took an important step in legitimizing and supporting the CT faculty track through the formalized policies described above. They invest resources (both financial and in faculty time) to hire, train, and develop the CT faculty workforce. All of this is lost when faculty members leave the institution. For this reason, we studied factors that contribute to faculty satisfaction at UD. We have previously reported our results on T/TT faculty [16]. In this study we focus exclusively on the experiences of CT faculty and their unique circumstances at UD.

Faculty Climate Study: Background

Funded by an NSF ADVANCE Institutional Transformation grant, our research team designed a climate survey to help us understand UD faculty’s perceptions of aspects of their work lives. Many factors influence faculty career satisfaction, including one’s experience within their department, salary, resources, access to mentoring, departmental leadership, and others [16]-[17]. For our study of CT faculty career satisfaction at UD, we focus on three key factors: department climate, strength and clarity of policies (in this case, related to CT promotions), and mentoring. We chose these factors because they are identified in the literature as relevant to faculty career satisfaction in general and they are related to the history and development of CT faculty at UD specifically. In this section we will briefly describe these factors and how they relate to CT faculty at UD. Table 1 below overviews sub-topics explored in the survey for each factor.

Department Climate	Promotion Policies	Mentoring
<ul style="list-style-type: none"> ○ Experience as faculty member within department ○ Experience of community at UD ○ Teaching load ○ Service load ○ Salary ○ Career advancement* ○ Inclusivity of department* ○ Collegiality of department* <p>*multiple survey items were used to construct scales for these topics</p>	<ul style="list-style-type: none"> ○ Reasonableness of promotion standards ○ Flexibility of the promotion system in terms of weight given to teaching, research, and service ○ Whether standards have changed over the last 5 years ○ Whether the promotion system is bias-free ○ Whether standards are applied fairly at different levels (department, chair, college, dean, university, provost) ○ Resources to understand the promotion process (departmental colleagues, departmental documents, faculty handbook, department chair) 	<ul style="list-style-type: none"> ○ Availability and quality of formal within the department ○ Availability and quality of informal mentoring within departments, outside the department but within UD, and outside UD

Table 1. Overview of questions asked of CT faculty in the climate survey

Our goal in this study was to explore CT faculty's satisfaction with aspects of their work life to identify areas of high satisfaction, low satisfaction, and areas where satisfaction changed over time. We conducted the survey twice: in spring 2016 and again in spring 2018. We expected that comparing results between these years would offer insight into the effectiveness of certain programs, policies, and interventions aimed at improving career satisfaction and retention and advancement of CT faculty.

Departmental Climate Departmental climate refers to the way people experience working in and being a member of a department. It is related to how welcomed and included (or not) people feel and how well they are situated to succeed professionally within the department. Because of the varied nature of the CT faculty track, different CT faculty members may have quite different experiences depending on factors such as department, workload, and how they were hired.

At UD, some issues associated with departmental climate are likely related to the fact that there's no unifying concept of what a CT faculty member is or what they do. Academics tend to have a general understanding of the function and duties of T/TT faculty. However, it's harder to understand what it means to be CT faculty, whose jobs and responsibilities vary so much across campus, and sometimes even within a single department. CT faculty members' treatment within their departments vary as well. NTT faculty in general commonly report being treated as "second class" [2]. At UD, this occurs more in some departments than in others. Part of the reason is historical. Different CT faculty were hired in completely different ways, which is common for NTT faculty [2]. For example, some CT faculty on our campus were hired long ago as teaching staff or researchers and received faculty status later. Others were hired as part of a dual-career accommodation. It stands to reason that some of these faculty have not been well integrated into their departments and may be considered by their T/TT colleagues as second-class or "not real" faculty. In contrast, other CT faculty were hired via formal and rigorous faculty-search processes with buy-in from the department. The creation of clearly defined career pathways for CT faculty has allowed in recent years for intentional and competitive search processes, including full departmental votes on the hire. CT faculty members hired via this process start their jobs with much stronger standing in the department than those who were hired via less formalized processes years or decades earlier.

Many other factors influence departmental climate for CT faculty. Examples include the extent to which CT faculty are included in departmental decision-making, availability of resources to support professional success, and the alignment between assigned and actual workload. The size of the CT community within a department can make a difference too. Some departments have only a single CT faculty member, while others have a strong community of CT colleagues. This may affect the CT faculty's experience of community, inclusion, and collegiality within the department. It may also influence the extent to which departmental policies and procedures

accommodate CT faculty, as well as the chair's understanding (and perhaps even acceptance of) the role of CT faculty in the department.

Strength and Clarity of Promotion Policies Career advancement is related to faculty career satisfaction [12]. At UD, formalized promotion processes for CT faculty parallel those for T/TT faculty. Both are evaluated with respect to their assigned workloads. Like T/TT faculty, CT faculty candidates submit a full dossier for review. External letters are solicited as part of the review process, although, depending on a CT faculty member's workload and departmental policies, letters can in some cases come from outside the department but within the university. Like for T/TT faculty, CT dossiers undergo evaluation at a number of levels: by the departmental committee, the chair, the College committee, the dean, the University committee, and, finally, the provost and Board of Trustees.

Of course, there are some differences in the promotion process for CT faculty. Notably, there is no set time frame for promotion, although many CT assistant professors choose to go up for promotion to associate professor in the sixth year, the same time as their tenure-track colleagues. For CT faculty, a required contract-renewal evaluation occurs in year six. This review is internal and less rigorous than the review required for promotion. It is therefore possible for a CT faculty member to have their contract renewed and keep their job even if they do not choose to go up for promotion or if their promotion is denied. However, if they are unsuccessful in their year-six contract renewal review, they will be dismissed. Raises for CT faculty are tied to successful contract renewal, not promotion.

Because CT promotions are still relatively new, it is common for a CT faculty member to be the first in their department to go up for promotion. This can present a difficulty for both the faculty member and the department. The faculty member may have no examples of successful dossiers to look at or CT colleagues who have been promoted to provide advice. Likewise, the department may lack local precedent for what qualifies as evidence for excellence in teaching or in service. Tenured colleagues within the department may not have the experience to be able to advise strongly or may have difficulty evaluating dossiers of CT faculty members. When a dossier is not based primarily on standard academic evidence such as journal articles or grant dollars, it is not always clear what materials should be sent to external reviewers.

Exacerbating the confusion, CT faculty have a wide range of assigned workload distributions. Even within a department different CT faculty may have very different workloads. According to the Faculty Handbook, faculty are to be evaluated with respect to their assigned workload. However, there can be pressure to publish in order to be promoted, whether or not a CT faculty member has research or scholarship in their formal workload. This can create unreasonable expectations and a difficult situation for faculty who teach full loads and lack resources such as research assistants or funding for travel to present their work. It also generates confusion about

promotion standards and criteria when advice given by mentors and senior colleagues does not match the written rules.

In recent years, there has been increasing availability of CT faculty who have been promoted to share their experiences and dossiers with their colleagues. However, the situation can still be murky and cause for anxiety among CT faculty. Although a CT faculty member's job is not on the line if they fail to be promoted, there are other downsides. The promotion to associate or full professor is important for career development and the new titles come with some degree of prestige. Moreover, the promotion process is arduous both for the candidate and for evaluators. Nobody wants to have to go through the process more than once for any given promotion. Finally, being voted against is demoralizing and may create feelings of tension and discomfort for the CT faculty member within the department.

Mentoring Because mentoring of faculty contributes to faculty career success [16], the University of Delaware advocates for all faculty to have a network of mentors, both informal (unassigned) and formal (assigned). The Faculty Handbook was revised in 2018 to state that all assistant professors and instructors should be assigned a formal mentor within the department or college. UD ADVANCE provides resources for faculty and chairs to support formal mentoring. In the past, the primary focus for mentoring had been on T/TT faculty, but CT faculty are included now as well. Because of the confusion concerning career pathways for CT faculty, it is important to understand the availability and quality of mentoring received by CT faculty.

Faculty Climate Study: Methodology

The survey instrument was based on faculty climate surveys given at other ADVANCE institutions, modified to meet the specific needs of our university. The majority of survey questions were 5- or 7-point items measuring faculty attitudes or perceptions of UD policies and climate. The online survey was sent via email in spring 2016 and again in spring 2018 to all T/TT and CT faculty. We report only on questions that did not change between these years to enable direct comparison of results. The survey was anonymous, so we did not track individual responses over time. In this paper we report only on the subset of the questions and analysis pertinent to CT faculty.

Unless otherwise indicated, satisfaction was measured on a scale from 1 (very dissatisfied/strongly disagree) to 7 (very satisfied/strongly agree), with 4 being neutral. To analyze survey results, we conducted an analysis of variance to compare CT faculty mean responses to each question by gender. Due to low numbers, we were not able to disaggregate by race or rank. Similarly, we do not compare the results for CT faculty with those of T/TT faculty. The sample characteristics between these two populations are quite different, which makes direct comparison difficult. For example, there are significant rank effects in a number of areas for T/TT faculty. We can't control for rank in the CT faculty sample, so we do not compare them to T/TT faculty.

In the section on departmental climate, several scales were constructed (inclusivity, collegiality, and career advancement) using multiple survey items. We report scale reliability (Cronbach's alpha) and composite scores for these scales. We chose a minimum alpha coefficient of 0.8 for scales.

Results

Here we overview key results, with a focus on responses that changed between 2016 and 2018. We found very few statistically significant differences between the responses of men and women, so we will not report or comment on those. A comprehensive presentation of climate-survey results, including differences in response between men and women, can be found on the UD ADVANCE website [18]-[19]. Unless otherwise indicated, all changes reported between 2016 and 2018 are statistically significant, with $p < 0.5$.

Sample Characteristics In 2016, the survey response rate was 37.5%, including T/TT and CT faculty. CT faculty (N=64) were underrepresented in the sample (18.1% of respondents vs. 25% of the population). In 2018, the overall survey response rate was 36.5%. Again, CT faculty were underrepresented (19.2% of respondents vs. 22.5% of population). Note, although the survey response rate is lower in 2018, the population size was larger because chairs and program directors were included in 2018 not but in 2016. The number of responses from CT faculty increased from 2016 (N=64) to 2018 (N=80). Table 2 below shows the representativeness of the CT sample by gender and rank as compared to the full faculty population for 2016 and 2018.

	Respondents 2016 (N=64)	Population 2016	Respondents 2018 (N=80)	Population 2018
CT Female	57.8%	55%	63.6%	62%
CT Assistant Professors	8.2%	11.5%	10.6%	10.3%
CT Associate Professors	5.1%	4.7%	2.6%	3.9%
CT Professors	0.6%	0.9%	1.9%	1.3%
CT Instructors	4.2%	7.9%	4.1%	7.1%

Table 2. CT faculty percentage of respondents versus percentage of full-time faculty population by rank and gender, 2016 and 2018.

Departmental Climate Faculty were asked about satisfaction with several aspects of their professional lives within their primary units: overall experience of being a faculty member, experience of community at UD, teaching load, service load, career progression, and current salary. In 2016, CT faculty rated their overall experience of being a faculty member between somewhat satisfied (5) and satisfied (6). For all other questions in this section, CT faculty reported lower levels of satisfaction--between neutral (4) and somewhat satisfied (5). Comparing

2016 and 2018 survey results, CT faculty reported significantly higher satisfaction in 2018 with teaching load (~4.9 vs. ~5.5) and career progression (~4.4 vs. ~5.1, $p < .01$).

In addition to these stand-alone questions about department climate, faculty were asked three series of questions from which scales were constructed: one on career advancement, one on departmental inclusivity, and the last on departmental collegiality.

Starting with career advancement, faculty were asked to indicate their level of agreement (from 1-7) with three questions: my level of career advancement reflects the effort that I have put into my work; my career advancement is consistent with my body of accomplishments; and the rewards I have received are consistent with my level of performance. In 2016, the mean response was neutral (4.12, $\alpha = .91$). Although in 2018 the mean response is closer to “somewhat agree” (4.65, $\alpha = .94$), the difference is not statistically significant.

A series on departmental inclusivity included a number of questions about sexism, racism, homogeneity, homophobia, and ableist tendencies within the department. This was measured on a 7-point continuum, from negative to positive attributes (i.e., sexist to non-sexist). A second series measured departmental collegiality, again on a 7-point continuum. It included questions about how contentious, isolating, hostile, competitive, individualistic, not supportive, unfair, and stressful the department is. In both 2016 and 2018, CT faculty perceived their departments as somewhat inclusive and collegial, with a higher score for inclusiveness both years. For inclusivity the mean increased from ~5.2 in 2016 ($\alpha = 0.84$) to ~5.5 in 2018 ($\alpha = 0.83$). For collegiality the mean increased from and from ~4.5 in 2016 ($\alpha = 0.94$) to ~4.9 in 2018 ($\alpha = 0.95$). However, neither of these increases is significant.

Promotion Process This section asked questions about perceptions of promotion standards, perceptions of fairness in how promotion standards are applied, and the helpfulness of resources intended to clarify the promotion system.

To measure perceptions of promotion standards, faculty were asked to what extent they agreed (using the 7-point scale) that standards are reasonable; flexible in terms of weight given to teaching, research, and service; whether standards have changed over time; and whether standards are free from bias. Respondents’ perceptions did not change between 2016 and 2018 regarding the flexibility of the promotion system (mean response just below 4) or whether promotion standards had changed over the last five years (mean response ~5.5). However, we see improvement between 2016 and 2018 with respect to respondents’ perception of the reasonableness of standards (mean response just over 4 in 2016 and close to 5 in 2018) and on whether the process was free from bias (mean response ~3 in 2016 increased to ~4 in 2018).

Moving on to fairness in the application of promotion standards, faculty were asked to what extent they agreed (using the 7-point scale) that promotion standards are fairly applied by departmental committees, department chairs, college committees, deans, university committees,

and the provost. In 2016 the mean response from CT faculty was between “neutral” and “somewhat agree” for department P&T committees, college P&T committees, deans, and university P&T committees. Department chairs scored higher, between “somewhat agree” and “agree.” The provost scored lower, between “slightly disagree” and neutral. By 2018, CT faculty perceptions of fairness had improved somewhat. The mean response among respondents increased at all levels, although the improvement compared to 2016 was statistically significant only for deans (from “slightly agree” to neutral in 2016) and the provost (neutral to “slightly agree” in 2018).

Finally, faculty were asked to rate how helpful certain resources were for understanding the promotion process. These questions were measured using 5-point scale from 1 (not at all helpful) to 5 (extremely helpful), with a midpoint score of 3 (somewhat helpful). Responses in all categories for both years were close to the midpoint, with no significant gender effects and no significant changes between 2016 and 2018.

In addition to the quantitative questions about the promotion system, in 2016 faculty were asked an open-ended write-in question about what could be done to improve the promotion process for assistant professors. A total of 47 CT faculty responded to this question. The most common themes were (1) the need for better alignment in workload and promotion standards (36.2%), (2) the need for greater transparency in the promotion process (27.7%), and (3) a lack of clarity in the criteria for teaching excellence (25.5%). With regard to perceived lack of alignment between workload and promotion standards, CT faculty pointed to the importance of factors like research productivity and reputation in their field, even though their workloads are primarily teaching based. Additionally, the standards for teaching excellence were perceived as unclear, with faculty uncertain about both how to document their teaching efficacy and what the evaluation process entails.

Mentoring CT faculty were asked whether they received formal mentoring within their department and informal mentoring in the department, outside the department but within UD, and outside UD. Formal mentors are generally assigned by one’s chair or supervisor, whereas informal mentors are not assigned. Faculty were then asked to rate the quality of the mentoring received on a five-point scale from 1 (very poor) to 5 (excellent), with a midpoint score of 3 (average).

In 2016, 19.4% of CT faculty received formal mentoring within their department. By 2018, this number had risen to 32%. In 2016 and 2018, informal mentoring was both more common (~2/3 of CT faculty had informal mentors within their departments) and perceived to be of higher quality than formal mentoring.

Discussion

Survey results show that CT faculty at UD are neutral to somewhat satisfied with most aspects of their jobs. This satisfaction may be related to benefits of the position (for example, flexible promotion timetable, pay raises linked to contract renewal rather than promotion, sabbatical eligibility, relative job security, etc.). Survey results also indicate improvement in CT faculty career satisfaction in a few key areas that align with actions taken by administrators and faculty at UD to increase support for CT faculty career development. These results point to some level of effectiveness of these actions. Other results suggest improvements that still need to be made.

CT faculty satisfaction with teaching load improved between 2016 and 2018. This result is consistent with recommendations offered in the 2015 report on CT faculty commissioned by the provost [15]. The report tightened up the description of CT faculty and made suggestions for codifying CT faculty promotion policies. It recommended that CT faculty be evaluated for contract renewal and for promotions based upon their assigned workload, and that their workload be consistent with what they actually do. In other words, if a department chair or dean wants a CT faculty member to be on a committee, the faculty member can't have a full teaching load. Although the report was dated March 2015, change did not happen immediately. Departments were required to modify their promotion and tenure documents in light of the recommendations, but many were not approved until 2017 or later. It is possible that in the wake of this change, some CT faculty members' assigned workloads were adjusted to allow for service and/or research. It is also likely that new CT faculty hired between 2016 and 2018 were assigned lower teaching loads and commensurately higher service and/or research loads.

Survey results indicated improvement in CT faculty satisfaction in a number of areas related to career advancement (career progression; the reasonableness of promotion standards; the absence of bias in the promotion system; and how fairly promotion standards are applied). These improvements in satisfaction may be due to several factors. First, as discussed, departments were required to revisit and revise their promotion and tenure policies to accommodate CT faculty. These faculty discussions alone would have raised awareness of and sensitivity to the issue. The resulting new policies provided clarity and transparency that had been lacking. Second, faculty groups started to organize, discuss, and mentor CT career-development and promotion. UD's CT Caucus had existed for some years, but in the wake of the 2015 task force activity, this group started to develop and provide resources to support CT faculty success. Examples include annual panels of recently promoted CT faculty and members of P&T committees to help demystify the promotion process, dossier-sharing networking events, and a detailed study of best practices in evaluating excellence in teaching and service. UD's NSF ADVANCE team has also offered events specifically for CT faculty in recent years, including a panel discussion on success on the continuing track. Finally, UD's Center for Teaching and the Assessment of Learning (CTAL) offers monthly workshops to support teaching and learning on our campus, including an annual session on documenting teaching for promotion and tenure. Participation by CT faculty tends to

be high at these events, which are informative and opportunities to build community among CT faculty. Improvements in CT faculty satisfaction having to do with career advancement and promotion pathways suggest that these programs, combined with clear documentation of policies, lead to increased career satisfaction for CT faculty.

Finally, we see an increase between 2016 and 2018 in the percentage of CT faculty who receive formal mentoring within their departments (19.4% vs. 32%). Note that in 2018, still under a third of CT faculty members had assigned mentors. This is likely not a problem for some, because survey results show that around two-thirds receive informal mentoring. However, not everyone has equal access to informal networks [20]-[21] and a benefit of assigned mentoring is that it makes sure, in principle, that everyone has at least one mentor. As more CT faculty are promoted into higher ranks, these senior CT mentors can be assigned to junior colleagues. But T/TT faculty can mentor CT faculty if they are familiar with the policies and unique issues facing CT faculty. UD ADVANCE, the CT Caucus, and others are working to make this information readily available to faculty in order to improve mentoring for all.

Conclusion

Professional-track faculty play an important role in the mission of higher education. As these faculty are hired in greater numbers and perhaps with higher levels of leadership, it is in an institution's interest to support their career satisfaction and development. We have presented empirical data from a climate study at an institution with progressive employment policies for professional-track faculty. Our results show that UD's CT faculty are moderately satisfied with their careers. We have documented improvements between 2016 and 2018 in how CT faculty perceive their careers—especially with respect to clarity and fairness of promotion policies. We also see an increase in formal mentoring for CT faculty. At this early stage in our research, we suggest two broad recommendations for institutions wishing to enhance career satisfaction and success of professional-track faculty: (1) Develop and disseminate clear institutional employment policies that recognize the unique role that these faculty play in the institution; and (2) Provide opportunities and resources for mentoring of professional-track faculty.

Much additional research is needed to illuminate the experiences of this diverse population of faculty and to develop detailed recommendations for how institutions might support their career success. Our survey results tended toward neutral in many areas; it is our hope that a qualitative interview study, which we have initiated, will provide more nuanced understanding of the needs of professional-track faculty. Finally, our relatively small sample does not allow us to study potential effects of factors such as race/ethnicity, rank, or discipline/college. Future research on multiple institutions with similar populations could allow for more complex and meaningful analysis, as well as more detailed recommendations.

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