

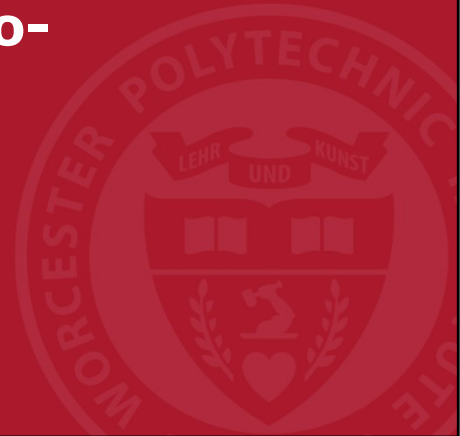


WPI

Equity in our Associate-to-Full promotion systems: How far have we come?



ADVANCE Adaptation Grant No. 1760577



Improving our Assoc-Full promotion system has been a grass-roots effort of the faculty since 2014, and we're delighted to give you a progress report today.

WPI ADVANCE Team



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Program



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Assistant Professor
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Program Coordinator (2019-2022)
Director of Operations, Engineering

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Since 2018 this effort has been bolstered by an ADVANCE grant from the NSF. Sue and I are representing this larger team with a range of faculty experiences, including as a TRT faculty member, department head, and a range of expertise including leadership and organizations, faculty development, and social psychology.



Importantly, the work of the grant has engaged MANY additional faculty, especially members of the Committee on Appointments and Promotions, department heads, and both TRT and TTT faculty at the Associate rank. We'll be sharing more about these summer working groups.

Close Collaborators in Department Head Development



Kris Billiar
BME



Doug Petkie
PH



Diane Strong
BUS

Internal Advisory Board Members



Kris Billiar
BME



Jean King
Arts & Sciences



John McNeill
Engineering



Doug Petkie
PH



Wole Soboyejo
Provost



David Spanagel
HUA



John Sullivan
MME

We also want to acknowledge these department heads who've been key collaborators, along with members of our internal advisory board.

This has been a campus-wide institutional change project that's been grass-roots driven with important administrative support and encouragement as well.

Outline

- Historical overview of faculty actions related to Associate-Full promotion
- Goals and activities of the ADVANCE grant
- New resources to clarify promotion and professional development of Associates
- Outcomes: What has changed? What has not?
- Promising practices and insights to take forward

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Since many of you were not at WPI when this work began, we'll begin with a historical overview and then shift to the main goals and activities of the ADVANCE grant, including some new resources that we want everyone to know about. We'll share outcomes data and what we've learned that can be carried forward.

Please jot down questions and comments as we go for the discussion period that follows.

Backstory: Work began in 2014

- Promotion to Full identified as institutional weakness in COACHE Faculty Job Satisfaction Survey
- Women particularly dissatisfied with:
 - Multiple aspects of promotion clarity
 - Mentoring of Associates in their department

“Lack of recognition for people who spend time on activities essential to WPI’s mission”



WPI participated in the COACHE faculty job satisfaction survey for the first time in 2014, and Promotion to Full really stood out as an institutional weakness. There was widespread dissatisfaction among Associate Professors, and also some significant differences by gender.

Here I'll pause to note that our terms and analysis are limited by binary sex data— women and men— in WPI records. Apologies for that.

Those who identified as women were particularly dissatisfied with lack of clarity and lack of mentoring.

COAP and COG created a task force that conducted interviews and focus groups with Associate rank faculty, TRT faculty, and women. Those revealed dissatisfaction not just with clarity and mentoring, but fundamentally what was VALUED and NOT VALUED, leading to differences in who is valued.

Faculty Actions, 2017-2018

- Revised election procedures and committee membership for Committee on Appointments and Promotions (COAP) and Joint Promotion Committees (JPC)
- Changed several promotion procedures
- Approved new promotion policy that includes:
 - criteria that explicitly recognize multiple forms of scholarship and range of impact indicators
 - acknowledgement of biases in faculty evaluation
- Approved framework for mentoring of Associate Professors

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There were multiple proposals and lots of debate through 2015 and 2016 that ultimately resulted in multiple actions over a two-year period...

We changed election procedures and membership of COAP to be more parallel with CTAF.

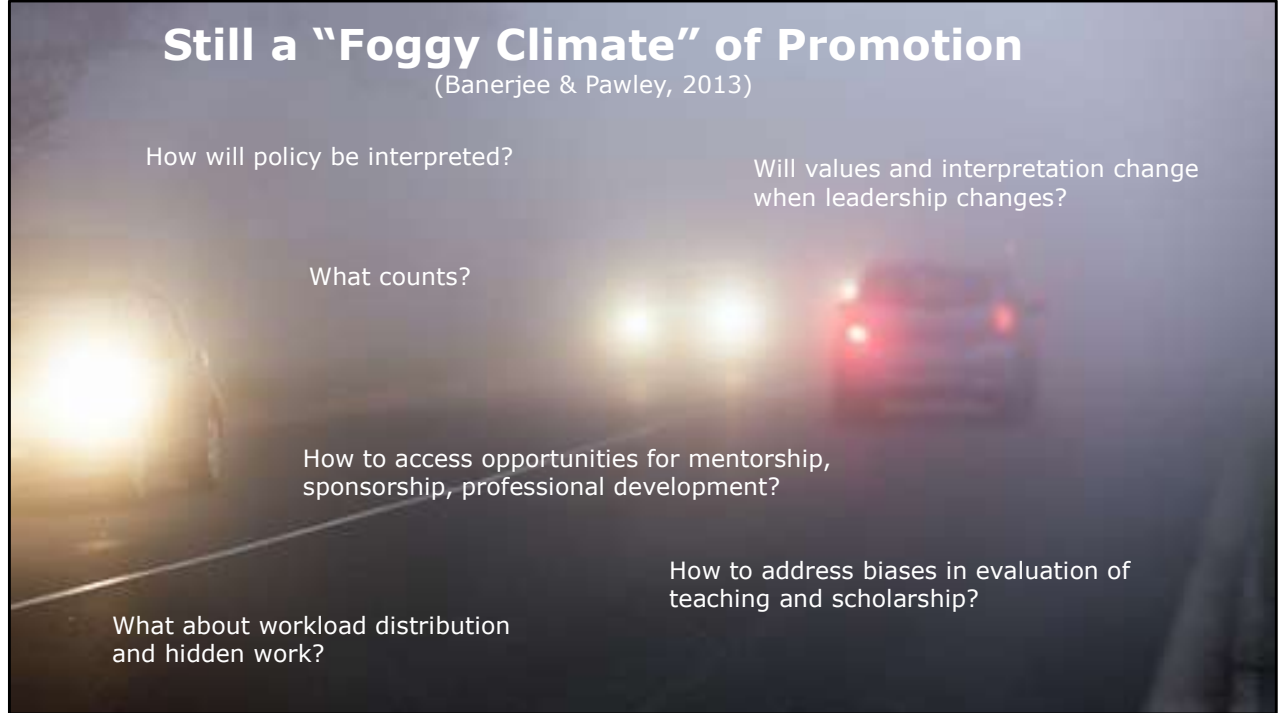
We changed multiple procedures related to participation of nominators and advocates, provision of feedback to unsuccessful candidates, and more

Those were relatively straightforward. Two additional actions are the main focus of today's discussion:

We approved a new promotion policy that adopted the conception of scholarship proposed by Ernest Boyer in the 1990s. The policy uses his broad, inclusive definition of scholarship and then defines 5 forms as examples: teaching and learning, engagement, integration, application and practice, and discovery. External impact of scholarship is required, but the text makes clear that this includes internal contributions to WPI that are externally disseminated. So now it's explicit that a much broader range of work can be pursued and rewarded as scholarship.

The policy also acknowledged the effect of biases on faculty evaluation.

And in 2018 we approved a campus-wide framework for mentoring of Associate Professors.



Those changes seemed promising but we knew that promotion would still be characterized by a foggy climate.

Foggy climate is a research-based metaphor to convey that conditions of ambiguity in things like promotion policies and processes are more likely to have negative consequences for women and other historically underrepresented groups for a couple reasons.

In ambiguous conditions, evaluators are more likely to fall back on mental models of those with historical power and privilege.

Also, because of inequities in access to mentors and networks, some faculty have more difficulty navigating these ambiguous conditions— findings those headlights.

So all of the questions that you see here are part of the foggy climate. Maybe the fog can't be entirely lifted, but we need to provide aids to navigation.

Role of ADVANCE Adaptation Grant

\$1M, 3 yrs, 2018-2021⁺⁺



- Implement policy and practices to navigate ambiguity, reduce gender inequalities while realizing benefits for all faculty
- Attend to intersection of gender and TRT status
- Adapt evidence-based practices (e.g., O’Meara) to our context
- Dig deeper into Associate experiences via interviews

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The group of us applied for an ADVANCE grant to guard against just stopping with that policy document, which is really the “mobilization” phase of an institutional change process that also needs to include implementation and institutionalization to have lasting impact.

Some institutions with “Boyerized” reward systems have shown little change, because they didn’t really enact new policies or take on necessary culture change

We wanted to engage the campus in thoughtfully implementing the new promotion policy in ways that would benefit all and reduce gender inequalities.

The NSF ADVANCE program focuses on gender equality for academic careers in STEM, but we extended the work to the whole campus.

ADVANCE grants require attention to intersectionality, and we chose to focus on TRT status as a characteristic that intersects with others to shape one’s lived experience as an academic.

WE made this choice because women are over-represented among our TRT faculty, and TRT-specific issues had also been discussed but not yet acted upon.

The type of ADVANCE grant we got was an Adaptation grant, which means adapting evidence-based practices from elsewhere. We ended up developing some of our own original practices too, but we did draw heavily on the work of Kerry Ann O’Meara, who’s arguably the nation’s leading scholar of faculty equity including multiple forms of scholarship.

We also used the grant to dig more deeply into faculty experiences than had been possible

in the mobilization stage.

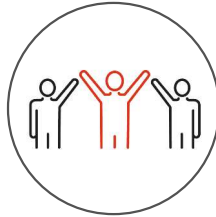
Implementation Goals and Activities

create a shared understanding of promotion policies and processes



resource development by summer working groups

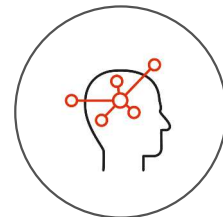
establish a mentoring and professional development system for mid-career faculty



programs for Associates and their mentors

redesign of annual review conversations with DHs

create processes for recognizing and mitigating biases in promotion systems



tools and practices for bias mitigation

The work of the grant has involved three main goals and activities. DH/annual review component emerged from interviews



Creating Shared Understandings:

Leveraging Power of Summer Working Groups

- Provide groups with equity foundations (e.g., principles-based audit and workshop by external expert)
- Pay faculty for manageable commitment (~1 week total)
- Undertake bite-size goals that aim for “small wins”
- Compose groups strategically to pave way forward
- Use facilitation approach that empowers members to make choices and do the work
- Decide on clear deliverables and disseminate in existing communication channels

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Bite sized important. Include people from key committees, getting DH input too.

Outcomes of Summer Working Groups

Resources & Tools

Collection of Sample
Dossiers (TTT, TRT)

"Guides" to Promotion
(TTT, TRT)

Matrix of Multiple Forms
of Scholarship

Evaluation of Teaching

Teaching Portfolio
Guidelines

Teaching Evaluation
Rubric

Peer Review of Teaching
Guidelines

Available to all on Canvas site:



or

<https://bit.ly/wpi-advance>

Collection of dossiers for everyone to have access to.

Guides to promotion share wisdom and best practices— not just for candidates, but also for the early years as an Associate and also with guidance for nominators and advocates who haven't had that role previously.

Matrix: artifacts, quality indicators, impact indicators. Certainly helpful to Associates and their mentors. **Also intended to document how we as a community want the criteria to be interpreted— for reviewers and for newcomers to our community.**

Another set of tools focuses on evaluation of teaching. To do a better job at evaluating teaching and also to significantly lessen the reliance on student ratings which we know are susceptible to biases.

Additional Outcomes of Summer Working Groups

Policy-Related

Updated and Consistent Language for TRT Promotion Policies & Practices

Draft Language for Valuing of Service & Collaboration

Alignment Efforts (CTAF-COAP)

Revision of Instructions to Letter Writers ✓

Uniform Definition of Scholarship Across Ranks

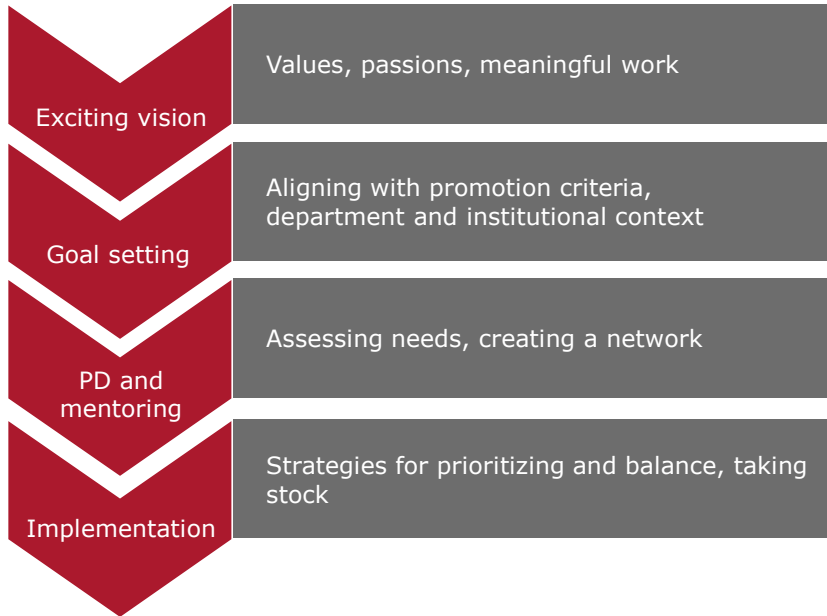
...still in committee queues

Some of these are still working their way through the system



Mentoring and Professional Development of Associates

Professional Development Plan (PDP) for Mid-Career



Model for Associate Professor Mentoring

Jan

PDP Workshop
for Assoc Profs

Jan-Mar

Select Mentoring Team
Annual Conversation
w/ Dept Head

Mar-Apr

Promotion Committee
Information Session

Aug-Sep

Strategy Workshop for
Assoc Profs and their
Mentoring Teams

Resource Repository: PDP template, Guide to Promotion, sample promotion dossiers, scholarship and teaching rubrics, National Center for Faculty Development & Diversity (NCFDD)

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Important Role of DHs

- Strong, emergent theme in interviews
- Shape or control multiple aspects of the “foggy climate”
 - Work assignments
 - Resources
 - Support for professional growth
 - Connecting to collective strategic goals and other mentors
- Wide range of experiences

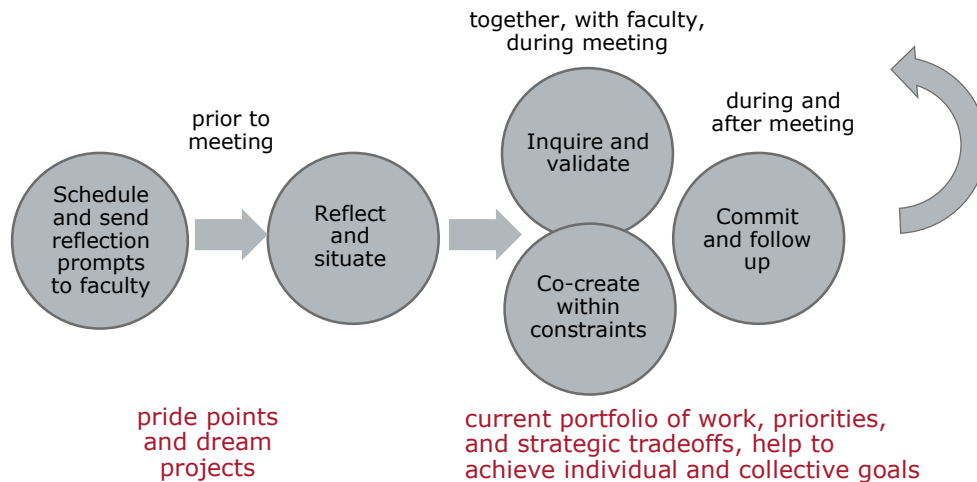


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Our interviews with Associate and Full Professors revealed that department heads were seen as particularly influential actors for Associates and that their practices and effectiveness varied widely. **Interviews also revealed that a key moment for mentoring—annual faculty reviews—were often missed opportunities. Interviews also revealed inequity in access to resources, and the lack of a systemic approach to requesting resources across the array of faculty interests and activities. We sought to transform the existing evaluative and generic annual review approach into professional-development mentoring conversations that addressed these issues.**

Transformed Annual Review Conversations

using a human-centered, pilot-based design approach



+ Tools for DHs: Workshop, templates, list of resources DHs can offer

Used a human-centered, pilot-based design approach, beginning with 4 dept heads in 2019, then refined and expanded to 8 in 2020, offered to all in 2021.

By using conversation template, normalizes/regularizes conversations about needs, hidden work, so that it's not up to the faculty member to ask.

This component of the work has gotten a LOT of traction with external audiences.

Outcomes of New Conversation Model: Faculty Reflections

77% reported annual review was better compared to other years or better than expected

75% left feeling valued

90% characterized conversation as positive

"I really liked the prompts that we had this year. They were much **more forward-looking**. Previously, I have felt like my annual review was just going over my report and saying, yes, I did a lot of stuff."

"It made it so asking for resources or a course buy-out was just a **natural extension of our conversation—rather than a separate ask** that I had to prepare for"

"I was able to share some of the **mentoring work that doesn't typically show up** in the official reports. And talk about why this was important to me and the institution."

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DEI implications in last two comments

Outcomes of New Conversation Model: Department Head Reflections

"Talking about interests and passions led to a whole different conversation—and **let me see them in a whole new way**. This was **especially the case for NTT faculty**, who I don't get to talk to much."

"Really appreciated the framing around integrative creative leadership—and having a conversation where we talk about the **individual and fit with strategic vision for the whole department**. It is absolutely about both."

"Was eye-opening to hear what they were most proud of—some of **that stuff was not even on my radar**."

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DEI implications in last two comments



Practices and Tools to Mitigate Biases

- First-ever bias awareness and mitigation training tailored for faculty evaluation at WPI
 - Goal setting
 - Recast as individual
 - Awareness
 - Challenge and confront bias
 - Engage egalitarian motivations
- Creates shared language for discussion of sources of bias and mitigation strategies
- Consideration of biases now regularized in COAP discussion of each promotion case

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After review of other programs, ended up creating an original, research-based training model.

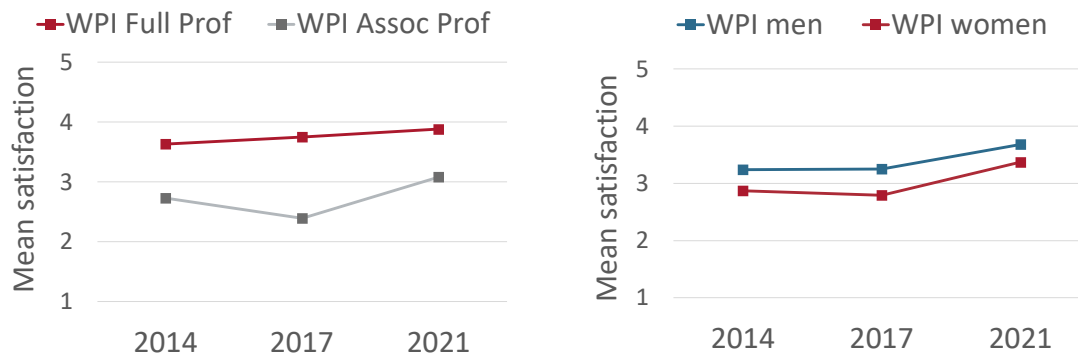
COAP now does a refresher annually.

DHs have participated in this training as well.

What has changed and what has not?

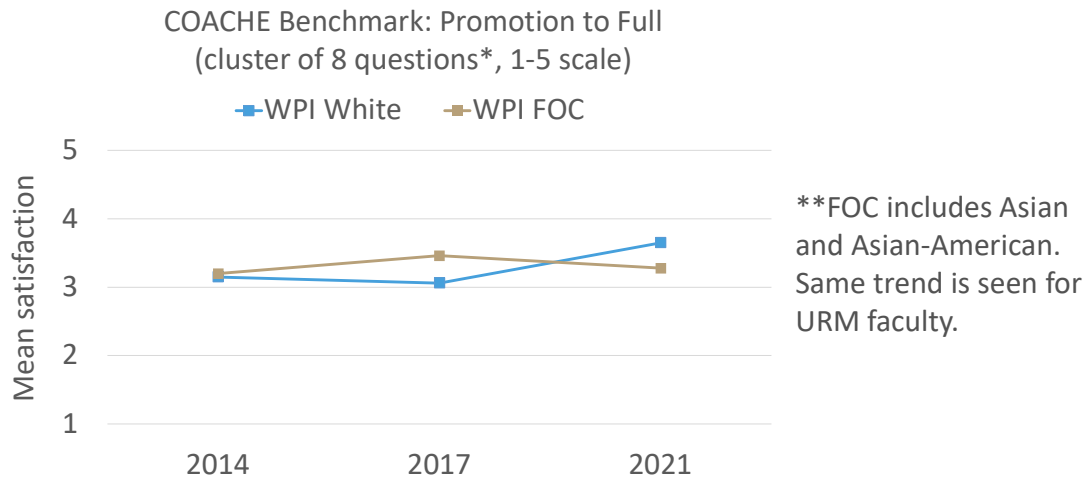
Overall levels of satisfaction with promotion to full have improved since 2014, but gaps by rank and gender remain.

COACHE Benchmark: Promotion to Full
(cluster of 8 questions*, 1-5 scale)



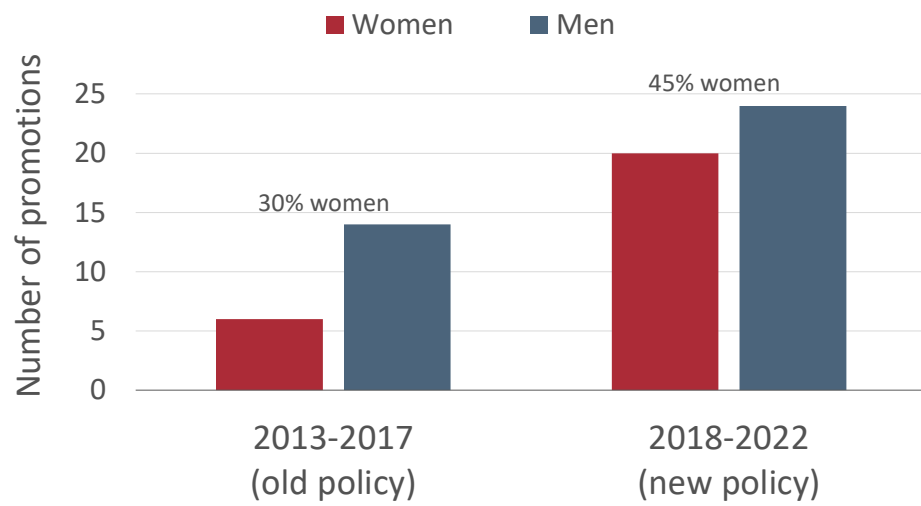
*6 questions on various aspects of clarity, 1 on reasonableness, 1 on department culture related to promotion

While satisfaction of white faculty with promotion to full has increased since 2017, it has decreased among faculty of color.**

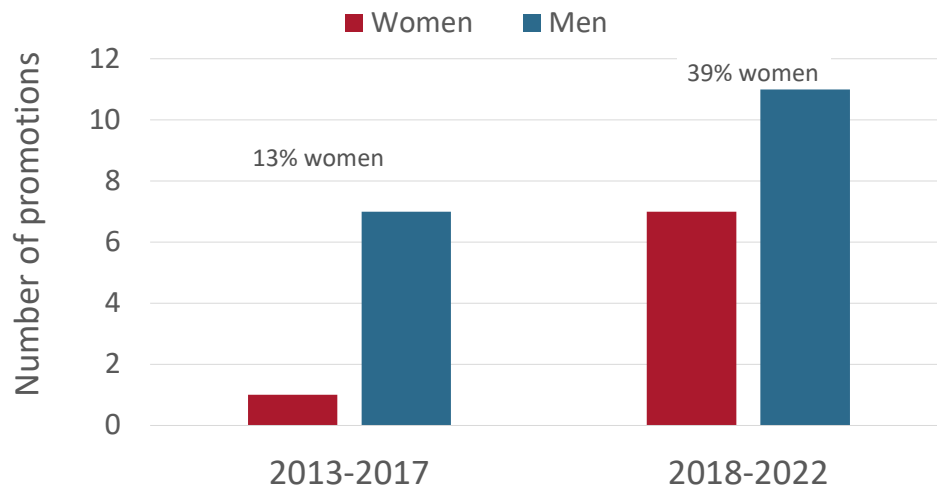


*6 questions on various aspects of clarity, 1 on reasonableness, 1 on department culture related to promotion

The number of tenured women promoted to (full) Professor has increased significantly across five years of the new policy and processes.

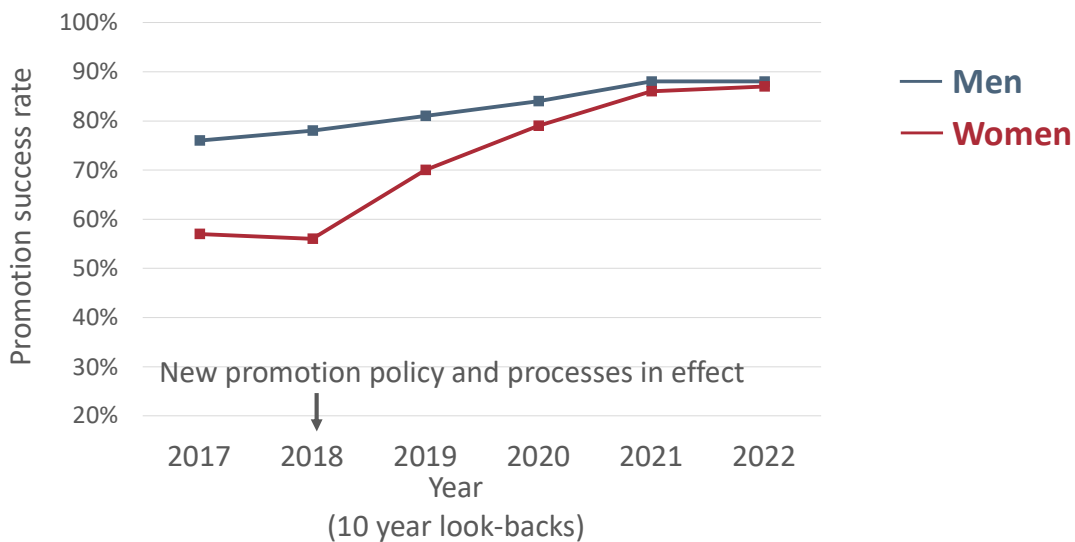


The number of women promoted to (full) Teaching Professor has increased significantly across five years.



Majority of women in 2018+ time period participated in Assoc Prof programming

The large gender gap in Associate-to-Full promotion success rate (TTT) has been narrowing since the new promotion policy went into effect.



Gaps were larger for STEM departments.

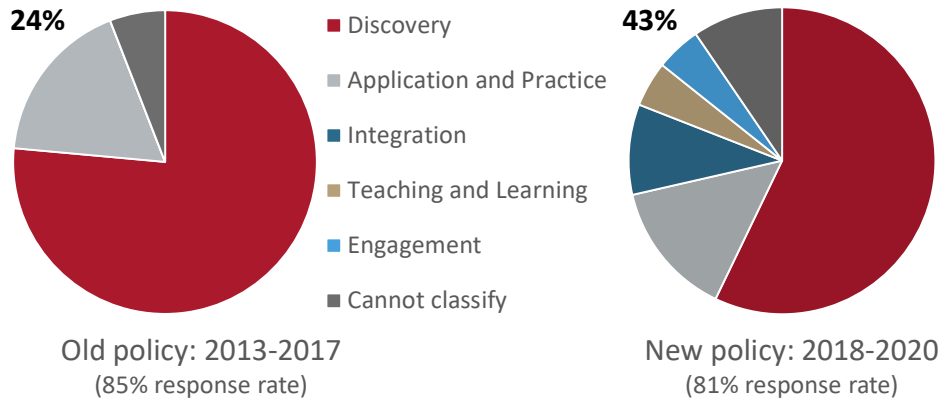
NO GAPS FOR TRT SUCCESS RATES

Differences in time-in-rank have also closed.

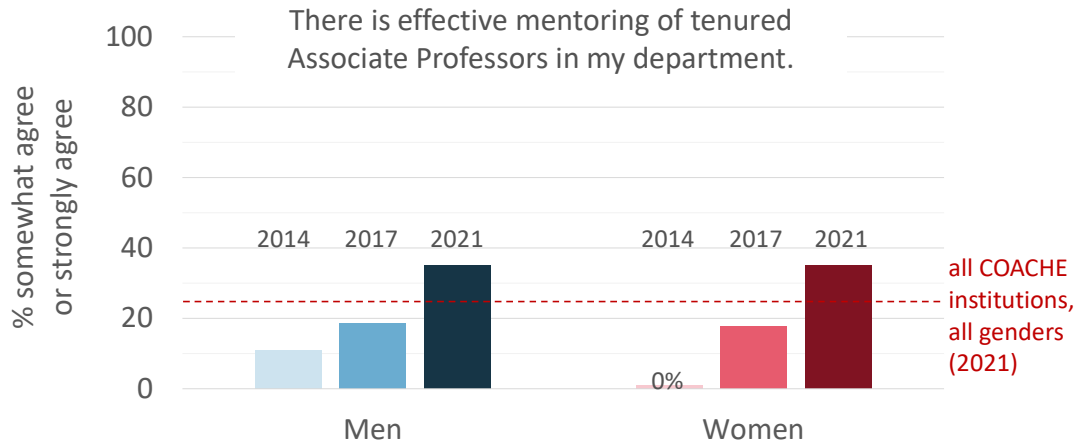
See supplemental data at end of deck for details.

Under the new policy, a larger proportion of successful promotion candidates have emphasized non-discovery forms of scholarship.

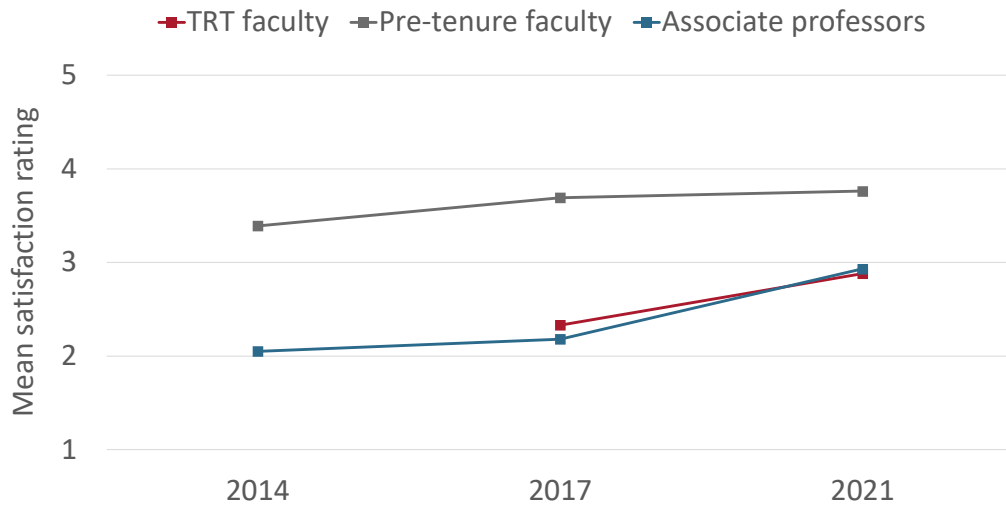
*Which type of scholarship did you emphasize **most** in your promotion case?*



Satisfaction with associate professor mentoring at WPI has increased and the gender gap has closed.



Ratings of mentoring effectiveness have a positive trajectory but vary by track and career stage.



COACHE report did not provide this datum for non-tenure track faculty in 2014
TRT group includes all ranks as well as PoPs and Instructors.

Promising Practices to Take Forward

1. Sustain intentional programming for Associate faculty
2. Continue summer working groups for ongoing “small wins” toward more equitable reward systems
 - Interim Provost supported a CTAF-driven group in summer 2022
3. Formalize leadership development mechanisms for Department Heads: annual conversation model *and more*
4. Embrace bias mitigation practices across all of our faculty evaluation committees

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Some Concluding Observations

1. Equity-minded policy implementation and practices require a lot more work from COAP, CTAF, DHs, Faculty Governance Office, and Provost's Office
2. Distribution and valuing of service is still problematic and limits our ability to address inequalities in an intersectional way
3. Many constituencies want to discuss having a uniform definition of scholarship across career stages and tracks

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Additional Data

Annual Conversations with DHs: How faculty felt before...

"Here's how our meetings went before: They basically just said, 'Check, check, check. Need anything?' Ok. 15 minutes and done. That's a review?"

"I left feeling like ...my greatest accomplishments, were only given token appreciation. Instead, what I heard more of was 'keep achieving more' or 'what is the next accomplishment going to be?'"

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Annual Conversations with DHs: How faculty felt after...

"I really liked the prompts that we had this year. They were much more forward-looking. Previously, I have felt like my annual review was just going over my report and saying, yes, I did a lot of stuff."

"I feel like this was the first time I ever heard from the department head about what their strategy was for the department, and explored how my work fit into that."

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Department Head Reflections on New Model

"Had to read over faculties' reports in more depth to really engage and think about what I was proud of and how [it] fit into my strategy."

"Really appreciated the framing around integrative creative leadership—and having a conversation where we talk about the individual and fit with strategic vision for the whole department. It is absolutely about both."

"Strategy of starting off with what *I* was proud of was amazing. For the first time, this senior colleague opened up. We had a great conversation about prioritizing what he was working on. I think he was surprised; I know I was."

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Department Head Reflections on New Model (cont'd)

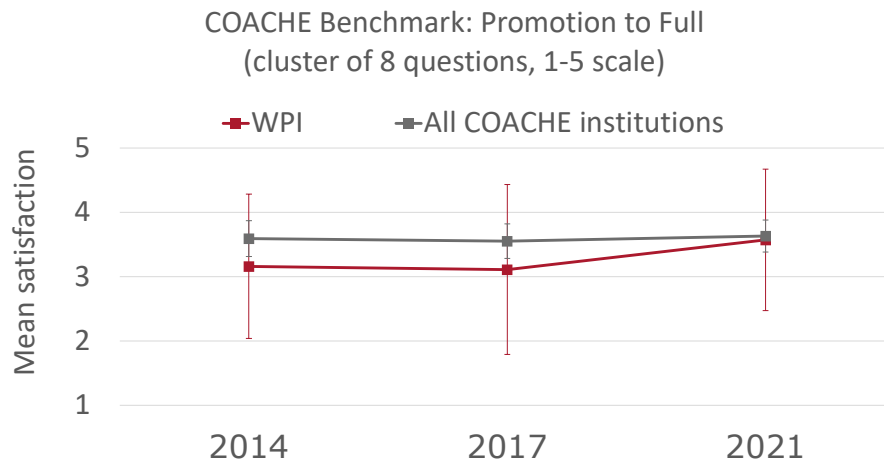
“Talking about interests and passions led to a whole different conversation—and let me see them in a whole new way. This was especially the case for NTT faculty, who I don’t get to talk to much.”

“Instead of asking them for what they needed, I made suggestions of alternatives—not just funding—which helped them feel like I was actively supporting them.”

“Was eye-opening to hear what they were most proud of—some of that stuff was not even on my radar.”

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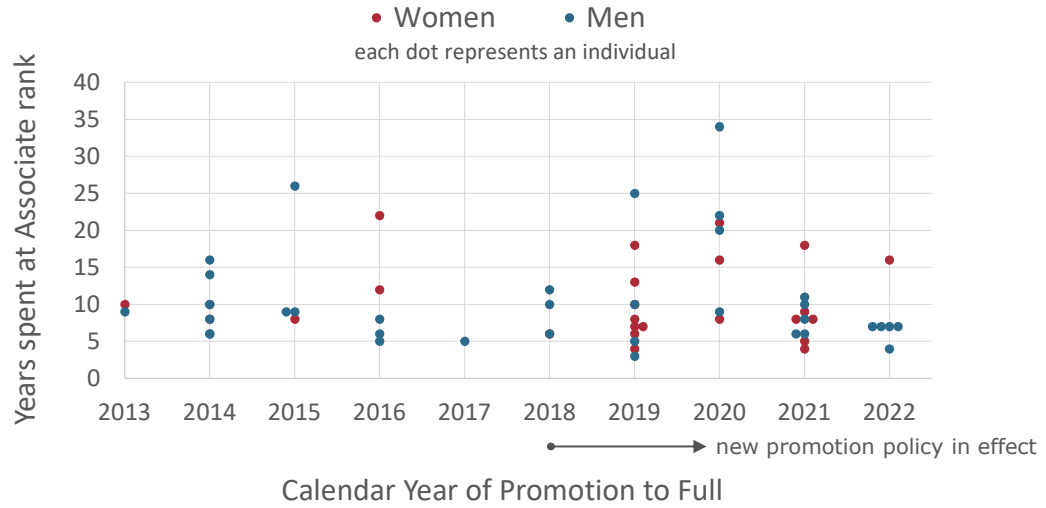
Faculty satisfaction with promotion to full was an institutional weakness in both 2014 and 2017, but not in 2021.



*6 questions on various aspects of clarity, 1 on reasonableness, 1 on department culture related to promotion

error bars indicate +/- one standard deviation.

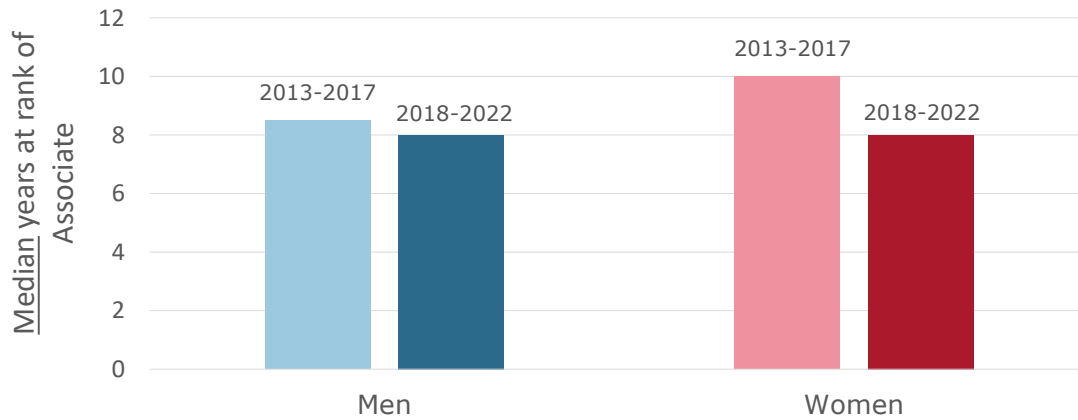
The new promotion policy opened paths of recognition for many more faculty who had spent >15 years at the Associate rank.



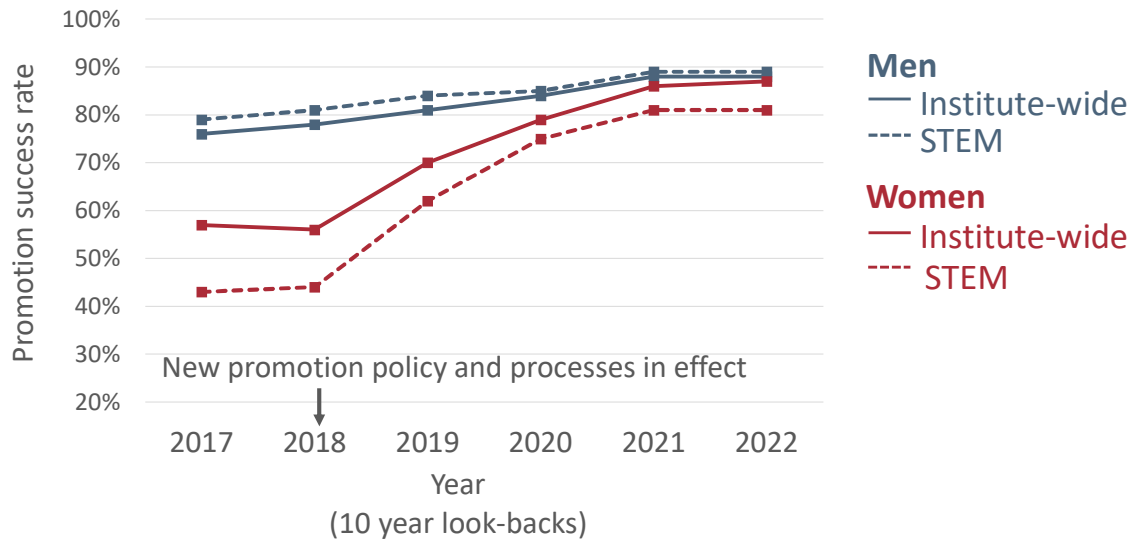
CHECK TO SEE IF THIS INCLUDES TRT

Since the new policy went into effect, women promotion recipients have spent fewer years at the rank of Associate.

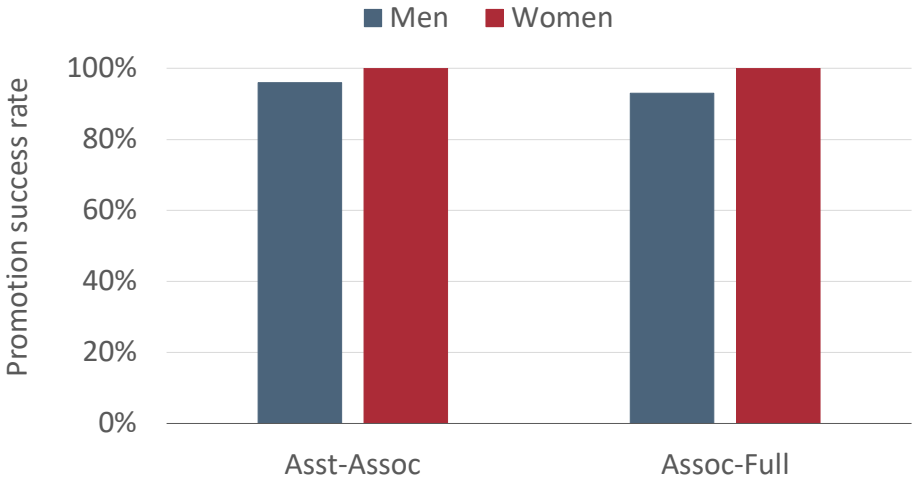
Analysis group: faculty who earned tenure at WPI and were promoted to rank of Professor, in 5-year spans before and after the policy change



The large gender gap in *Associate-to-Full* promotion success rate has been narrowing since the new promotion policy went into effect.

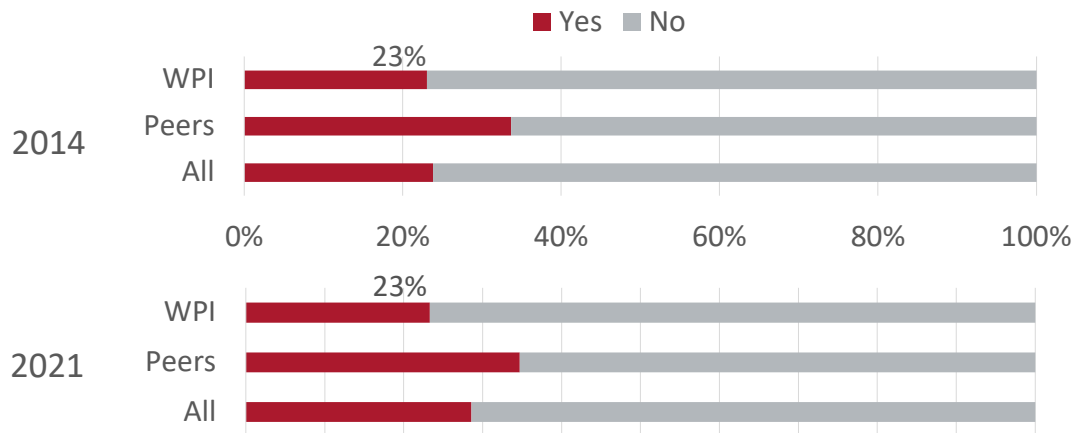


Promotion success rates have been consistently high for teaching-track faculty (2015-2022)



The proportion of WPI faculty reporting formal feedback about progress toward promotion remains low.

Have you received formal feedback on your progress toward promotion to full?



Only small differences by gender.

The membership of the Committee on Appointments and Promotions (COAP) has become more gender-diverse.

