
EXPANSION OF PROMOTION METRICS

JEANINE SKORINKO (WORCESTER POLYTECHNIC INSTITUTE)



This material is based upon work supported by the National Science Foundation under Grant No. 1760577

PICTURE AT WPI

Comparable to National Numbers

- 15% Full Professors were women
- 32% NTT STEM faculty were women (20% NTT STEM men)

Tenured Women Stuck in Rank (Geisler, Kaminski, & Berkley, 2007)

- 55% of women TTT Associate Professors had 13+ years since their highest degree (39% for TTT men)

Tenured Women Less Likely to be Promoted to Full

- Success rate for promotion is 56% for TTT women (78% TTT Men)

WHAT ARE THE BARRIERS?

Lack of Clarity in Promotion Criteria and Processes

- 26% of TTT women (45% TTT men) said the promotion timeline was clear
- 0% of NTT women (36% NTT men) said the promotion criteria were clear

Lack of Mentoring

- 0% of TTT women (11% TT men) satisfied with Associate Prof mentoring
- No official mentoring for NTT faculty

“FOGGY CLIMATE”

■ *Banerjee and Pawley, 2013





BIAS & HIDDEN WORK

PROMOTION POLICY FOR TENURED FACULTY CHANGED (2018)

- Multiple Forms of Scholarship:
 - Discovery = creation of new knowledge
 - Integration = critical evaluation, analysis, synthesis, or interpretation
 - Application & Practice = addresses important problems
 - Teaching & Learning = development and improvement of pedagogy and sharing it
 - Engagement = community partnerships to mutually exchange knowledge/resource
- Calls for awareness of implicit and explicit biases



IMPLEMENTATION & PROCEDURAL CHANGE

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create and sustain a
shared understanding
of promotion policy
and processes to de-
fog climate

for both non-tenure track and tenured faculty

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

for both non-tenure track and tenured faculty

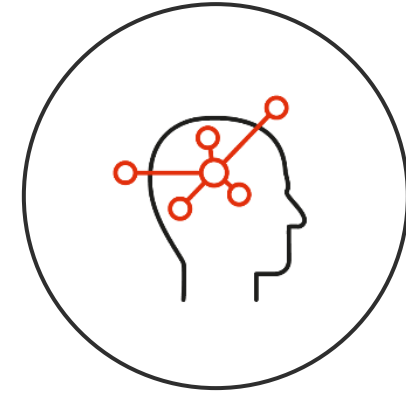
IMPLEMENTATION & PROCEDURAL CHANGE



create and sustain a shared understanding of promotion policy and processes to de-fog climate



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



create processes for recognizing and mitigating biases in promotion system

for both non-tenure track and tenured faculty



POLICY CLARIFICATION ACTIVITIES

Policy audits by external expert



Areas for
improvement

Diverse working groups for
non-tenure-track policy



Diverse working groups
for tenured policy



POLICY CLARIFICATION OUTCOMES

Policy audits by external expert

Diverse working groups for
non-tenure-track policy

Areas for
improvement

Diverse working groups
for tenured policy

- Revised policies
- “Guides” to promotion & sample dossiers
- Role of service & language to letter writers
- Evaluation of Teaching (Rubric, Peer, Portfolios)
- Matrix to clarify different types of scholarship

Multiple Forms of Scholarship Matrix

Scholarship Area	Brief Description	Products/Artifacts (work created by the candidate)	Evidence of Quality (evaluation of work created by the candidate)	Impact & Leadership (influence of work on others or the field)
Discovery	Creation of new knowledge E.g., Empirical research	<ul style="list-style-type: none"> • Publications • Presentations • Inventions and patents • Grant proposals • Creative products 	<ul style="list-style-type: none"> • Peer-review & acceptance • Research productivity indices • Successfully funded grants • Awards and honors 	<ul style="list-style-type: none"> • Citations of work by others • Designation as an expert • Featured performances • Editorial Role • Leadership in professional organizations
Integration	Critical evaluation, synthesis, analysis, interpretation E.g., Literature review, meta-analysis	<ul style="list-style-type: none"> • Reflective essays/reviews • Translations • Popular publications • Syntheses of the literature 	<ul style="list-style-type: none"> • Reviews in newspapers • Book talks in public • Examples where colleagues used scholarship 	<ul style="list-style-type: none"> • Evidence that others or the field have been influenced by outcome • Share scholarship with non-specialist/non-academic audiences
Application and Practice	Use of a scholar's knowledge to address important problems E.g., Development of technology	<ul style="list-style-type: none"> • Translational research • Commercialization • Start-ups • Technology development or transfer 	<ul style="list-style-type: none"> • Products shared with stakeholders and open to review and critique by stakeholders and by peers 	<ul style="list-style-type: none"> • Consulting related to work • Approaches, methods, and tools, adopted and assessed by an end user(s)
Teaching and Learning	Development and improvement of pedagogy that is shared E.g., Assessment of teaching practices	<ul style="list-style-type: none"> • Assessment & evaluation of teaching and learning • Development & dissemination of instructional materials 	<ul style="list-style-type: none"> • Products shared with other teachers at other institutions • External reviews of pedagogical practices • Public dissemination 	<ul style="list-style-type: none"> • Wide adoption of materials/methods by others • Popular (3rd party) articles • Social media hits/followers
Engagement	Partnerships with communities for mutual exchange of knowledge and resources E.g., Community-based programming	<ul style="list-style-type: none"> • Educational or public outreach programs • Partnerships with communities to address critical issues, prepare educated citizens, or contribute to public good • Publication in public scholarship venues 	<ul style="list-style-type: none"> • Works are visible and shared with stakeholders, and open to review and critique by community stakeholders and peers • Sustained, mutually beneficial relationships with communities/organizations. 	<ul style="list-style-type: none"> • Bringing to light and/or improving conditions of a community, region, agency, industry, or other sector • Generation of major gifts to endow a program • Citations or adoption of work by communities



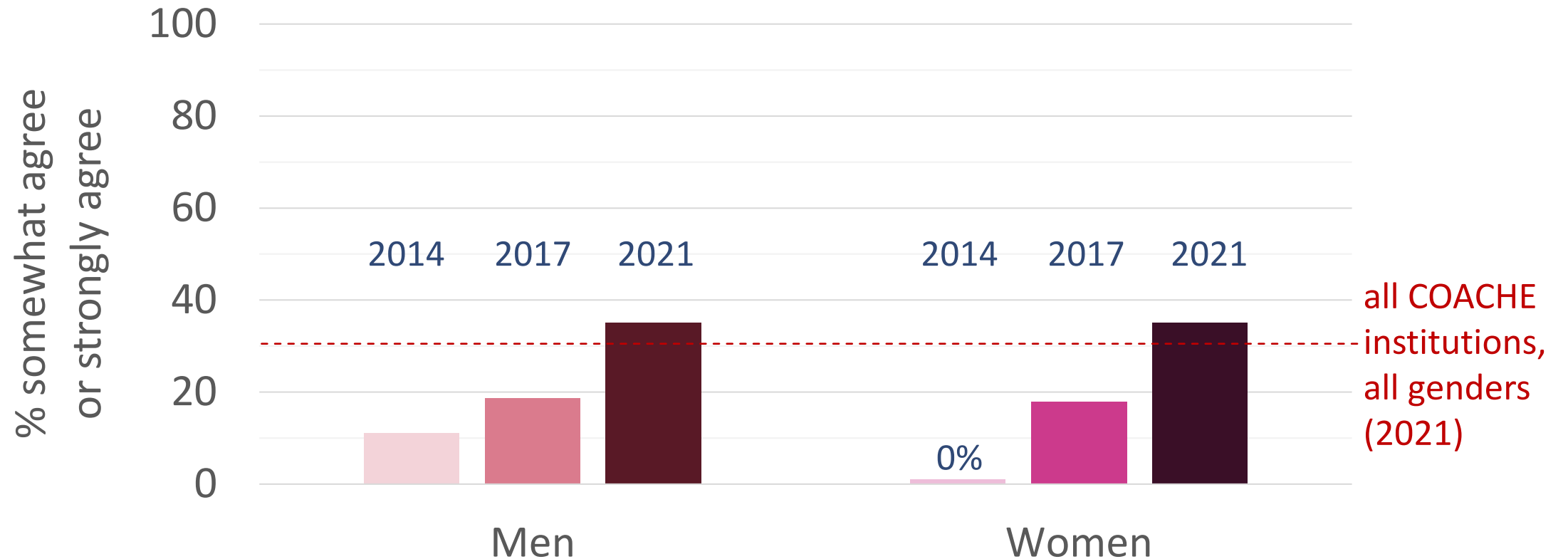
MENTORING ACTIVITIES

Mentoring Policies

Professional
Development

Mentoring Teams

MENTORING OUTCOMES



There is effective mentoring of tenured Associate Professors in my department.

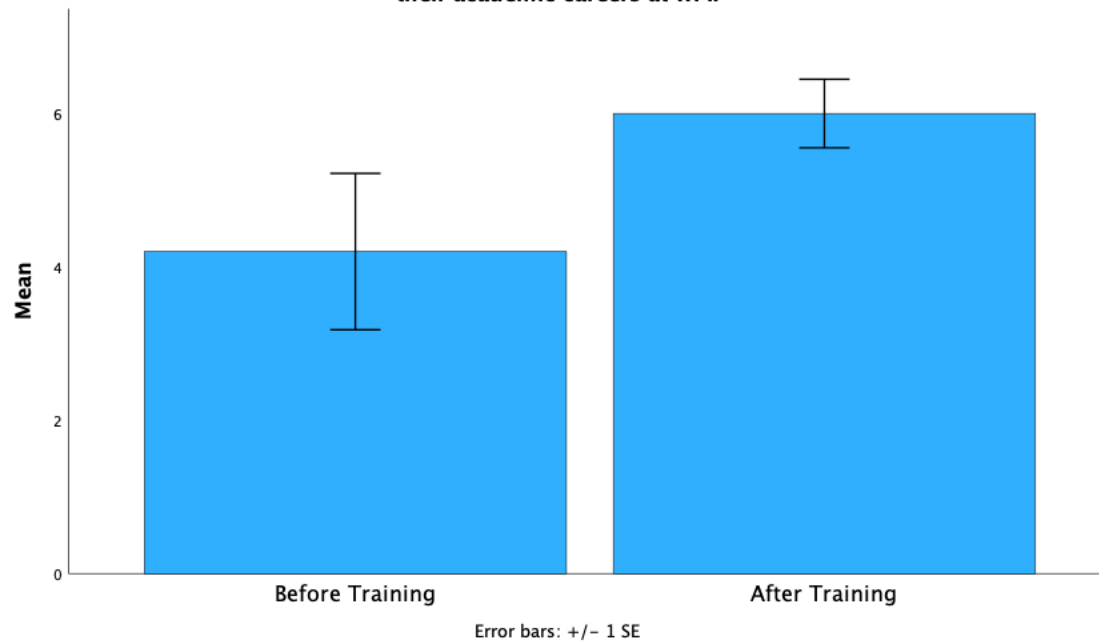


MITIGATING BIASES

BIAS Training

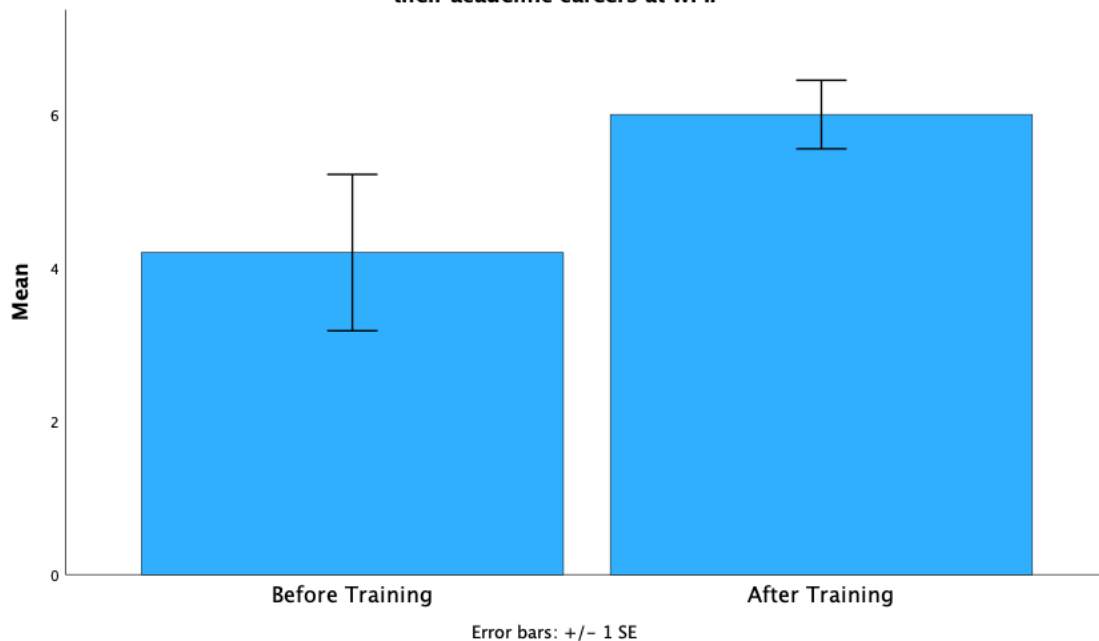
BIAS TRAINING RESULTS

Faculty who engage in non-discovery forms of scholarship face barriers in the advancement of their academic careers at WPI.

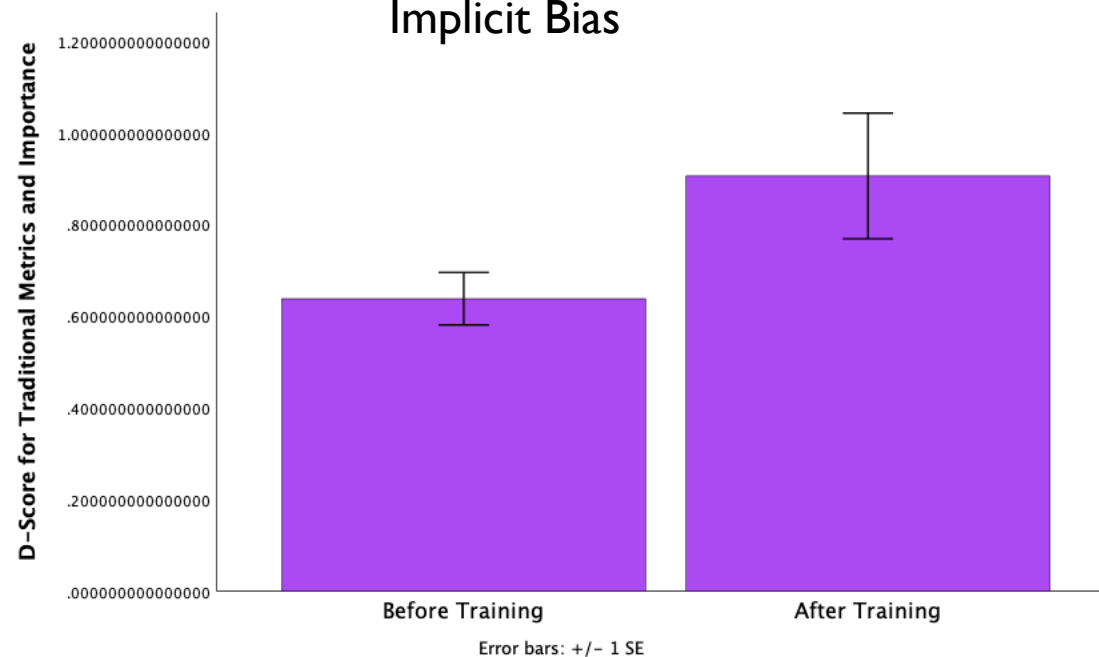


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Implicit Bias





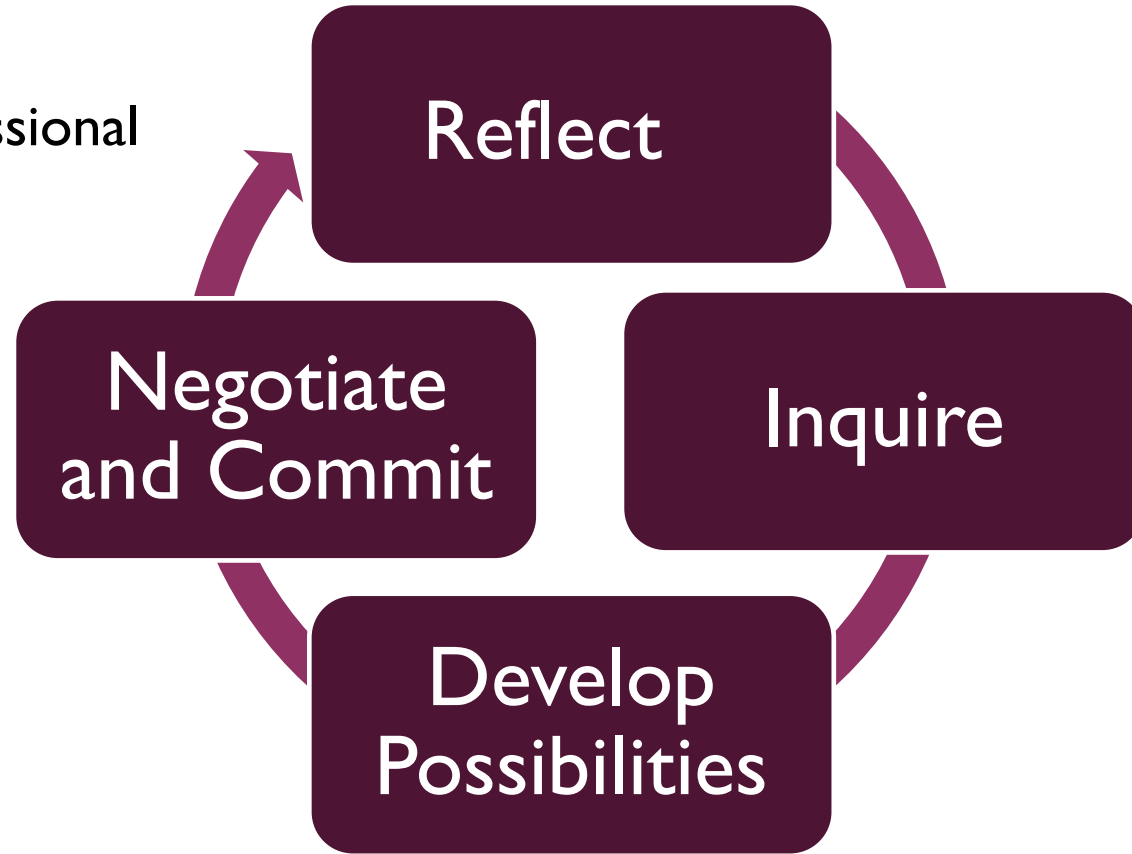
MITIGATING BIASES

BIAS Training

New Model for
Annual Reviews

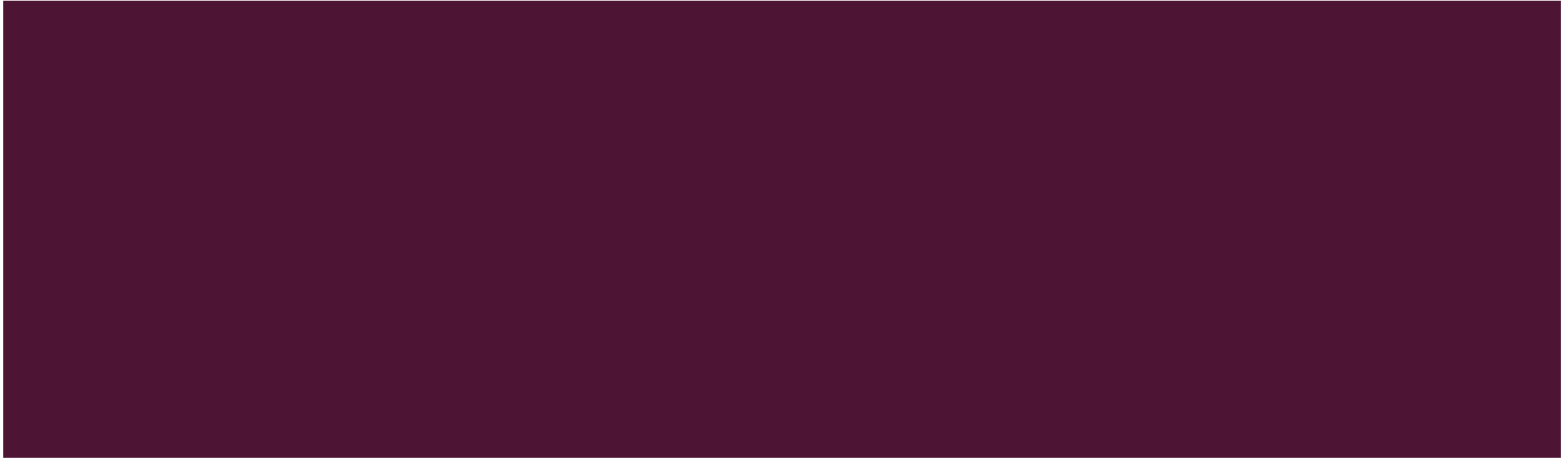
SHIFT FROM MANAGER-EVALUATOR MODEL TO CATALYST FOR INNOVATION MODEL

New model for annual professional development conversations:

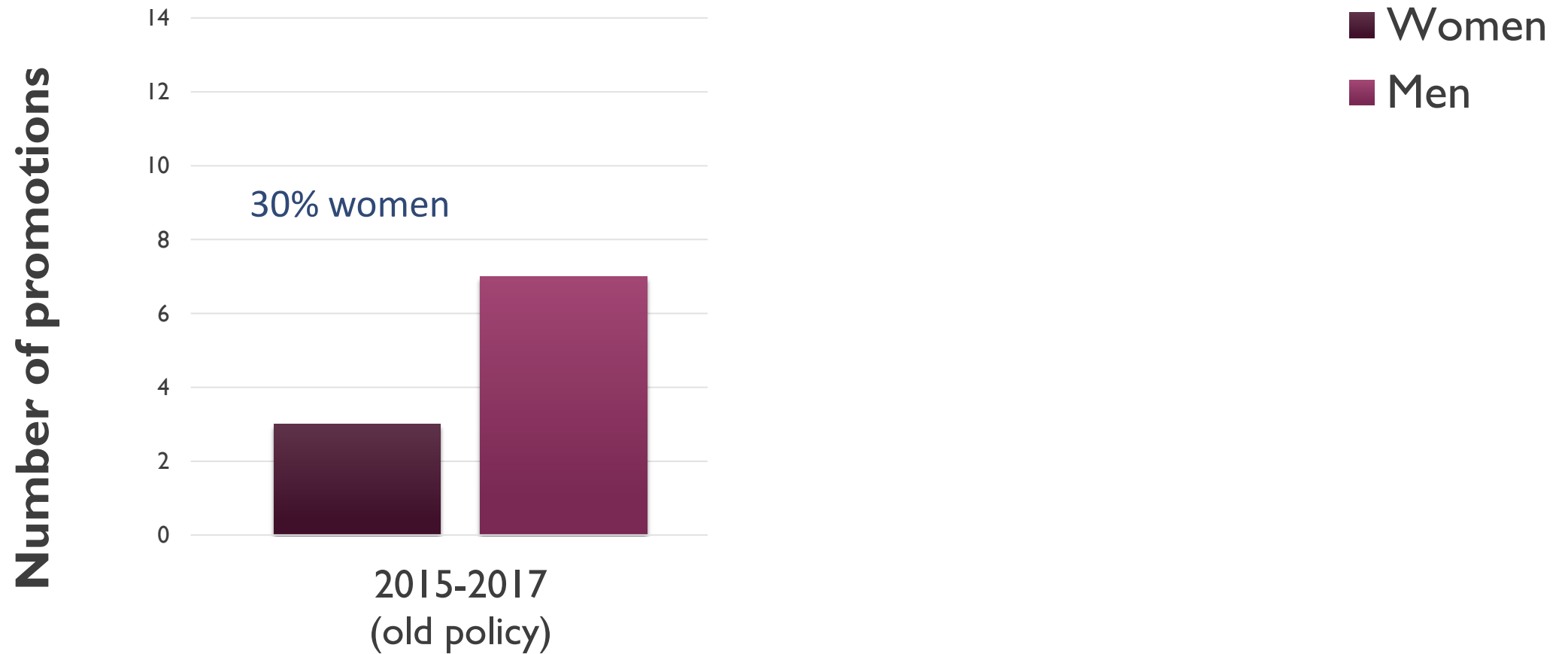




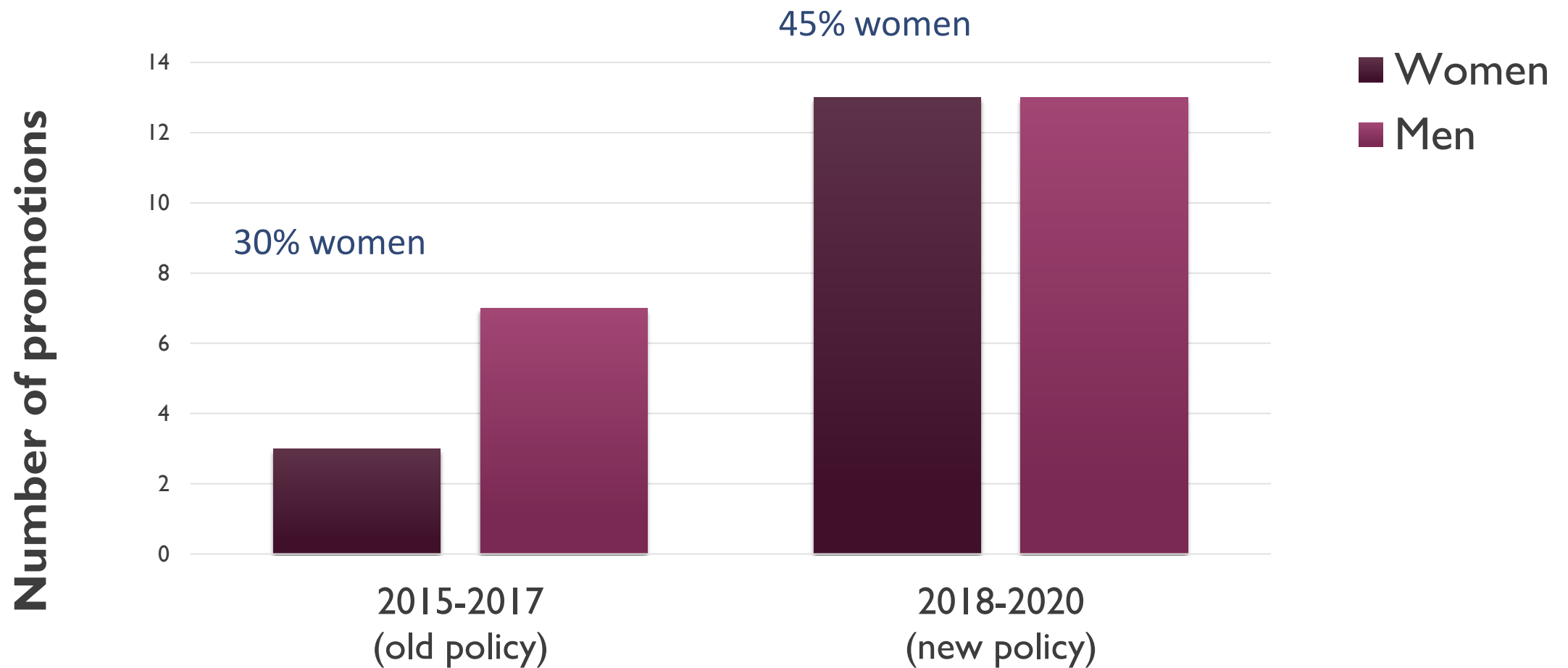
PROMOTION OUTCOMES



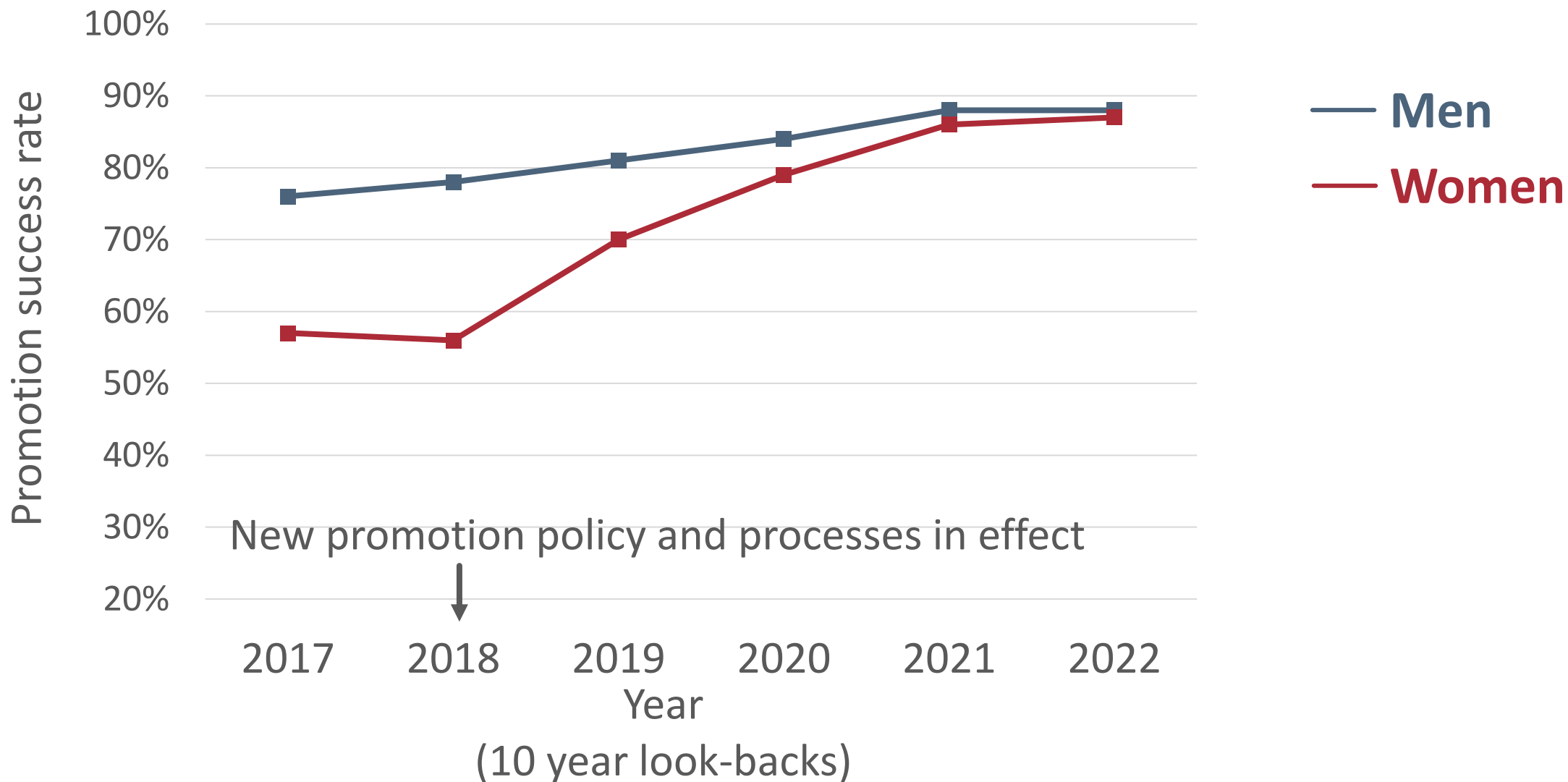
PROMOTIONS FOR TENURED FACULTY



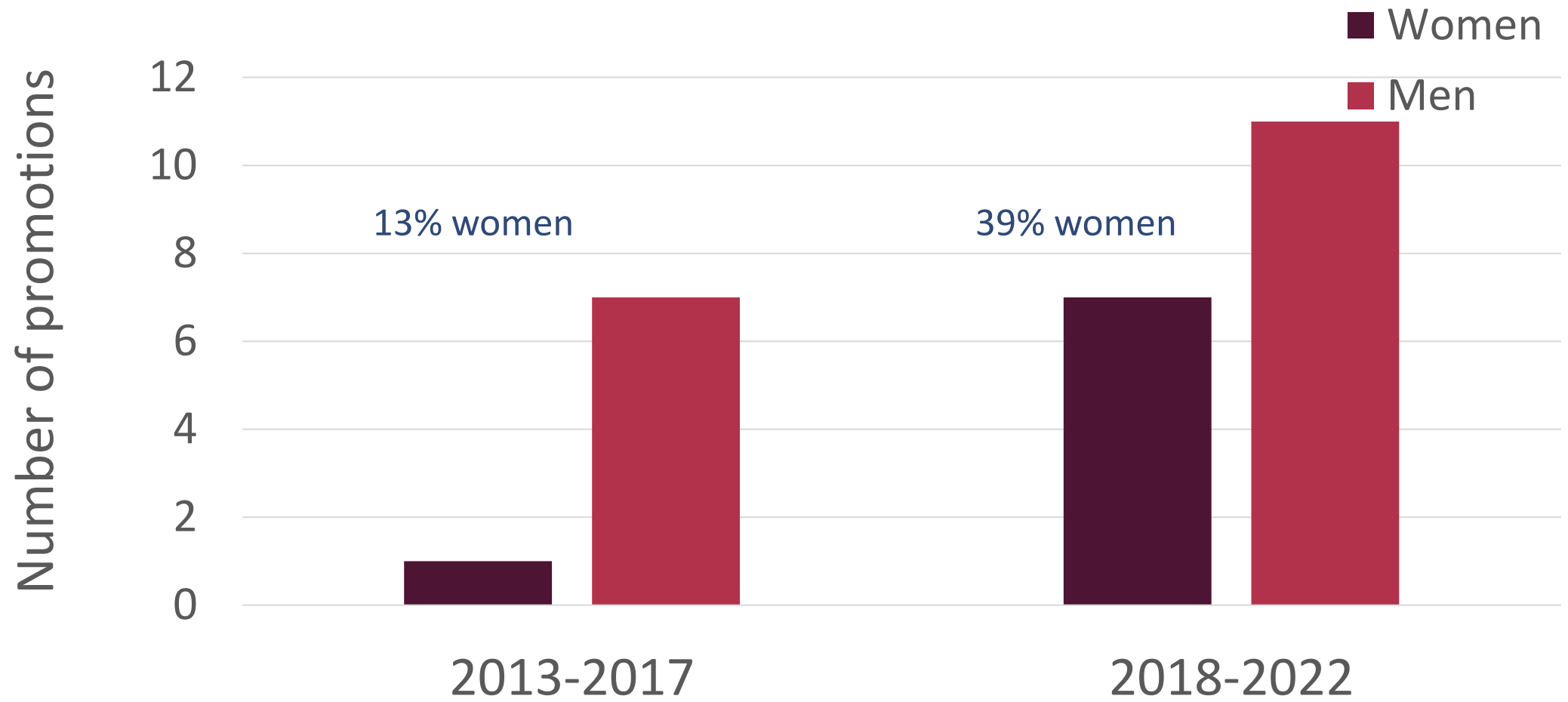
PROMOTIONS FOR TENURED FACULTY



Gender gap in Associate-to-Full promotion success rate (TTT) is narrowing

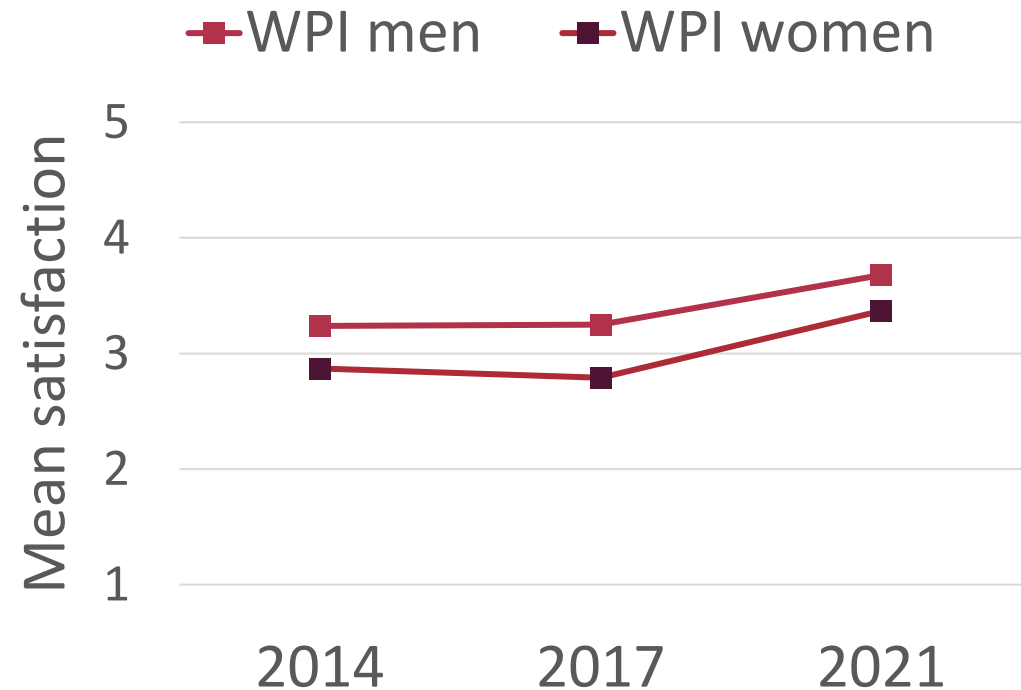
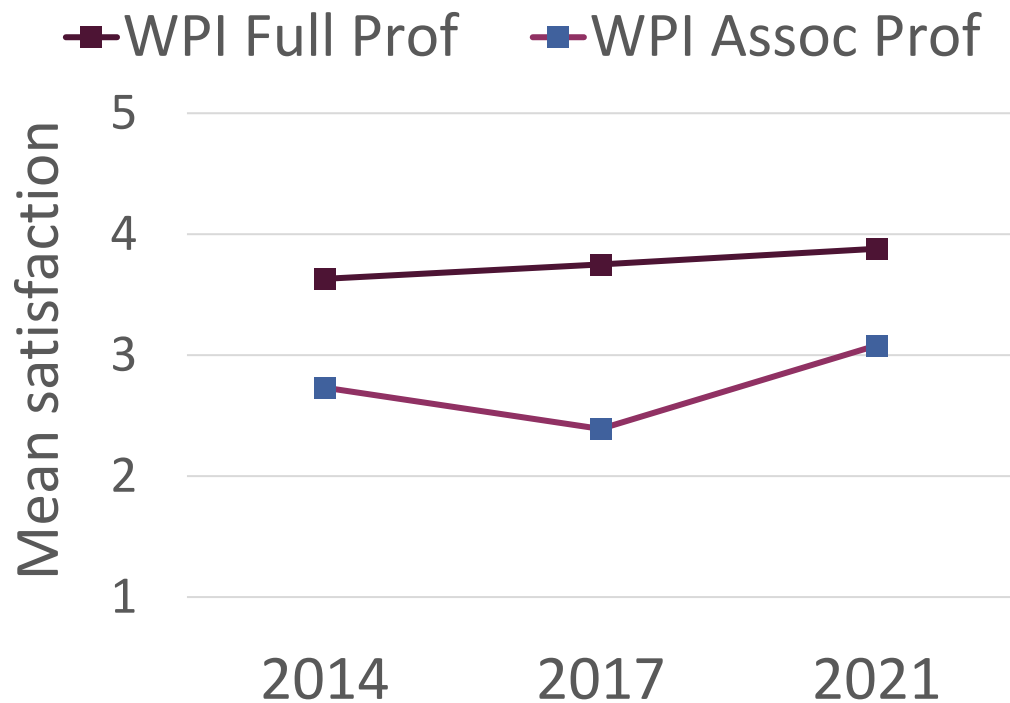


PROMOTIONS FOR NON-TENURE TRACK FACULTY



SATISFACTION WITH PROMOTION TO FULL IMPROVED, 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



INSTITUTIONALIZATION

PROMISING PRACTICES TO TAKE FORWARD

1. Summer working groups to work on equitable reward systems solutions
2. Sustain mentoring programming for Associate faculty
3. Formalize leadership development mechanisms for Department Heads
4. Continue bias mitigation practices with more attention to scholarship and status biases



CONCLUSION

WPI ADVANCE TEAM



Jeanine Skorinko

Professor, Psychology
Director, Psychological Science Program



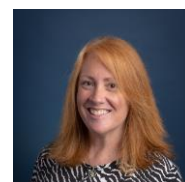
Elizabeth Long Lingo

Associate Professor
Business School



Chrys Demetry

Director, Morgan Teaching and Learning
Center
Professor, Mechanical and Materials
Engineering



Susan Roberts

Professor, Department Head, Chemical Engineering



Natalie Farny

Assistant Professor, Biology &
Biotechnology



Kim Hollan

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



ADVANCE Summer Working Groups



Category or Dimension	• Strong Evidence or Indicators of High Quality
Course goals & content <i>What are students expected to learn?</i>	<ul style="list-style-type: none"> • Course goals well-articulated, appropriately challenging, & clearly connected to program or curricular goals • Content is appropriate in range and depth
Teaching methods & practices <i>What assessments and activities are used?</i>	<ul style="list-style-type: none"> • Uses effective, high impact, or innovative methods • Students show high levels of engagement
Achievement of learning outcomes <i>What impact do courses have on learners?</i>	<ul style="list-style-type: none"> • Evaluation assessments are authentic, clear, & connected to program or curriculum • Fosters success in other contexts
Classroom climate & perceptions <i>What are students' views of their learning experience?</i>	<ul style="list-style-type: none"> • Evidence that class climate is respectful, motivating, engaging • Students perceive they are learning important knowledge or skills
Reflection & commitment to professional growth in teaching <i>Has the instructor's teaching changed over time?</i>	<ul style="list-style-type: none"> • Regularly adjusts teaching based on reflections on student learning • Seeks out peer review of teaching • Uses pedagogical resources to support teaching development
Project-based learning <i>How has instructor utilized project-based learning & advising?</i>	<ul style="list-style-type: none"> • Engages in HUA, IQP and/or MQP project advising • Embeds projects in undergraduate or graduate courses & programs • Shows development and improvement as a project advisor over time
Mentoring and advising <i>How effectively do they work individually with undergraduate or graduate students?</i>	<p>(as appropriate to department and discipline)</p> <ul style="list-style-type: none"> • Shows strong commitment to success, wellness, and personal/professional development of academic advisees • Number of advisees, advising/mentor methods, student testimonials
Commitment to diversity & inclusion <i>How do they support the success and inclusion of diverse students (e.g., race/ethnicity, gender, class, ability)?</i>	<ul style="list-style-type: none"> • Development of curricula and teaching/mentoring strategies are intentionally designed to enhance diversity and inclusion • Advises disproportionately high number of under-represented students

TEACHING RUBRIC

C&S Contribution Area	Examples of Citizenship and Service Contributions	Impacts/Measures of Citizenship and Service Contributions
To Field/Profession	<ul style="list-style-type: none"> Journal/Conference reviewer (for papers, workshops, symposia) Organizer of conferences, conference workshops, symposia, panels Chair/discussant in conference sessions Journal Editor, Associate Editor or member of journal editorial board Memberships and leadership roles in professional groups and societies Invited member to ad hoc Task forces in one's professional societies and groups 	<ul style="list-style-type: none"> Recognition or awards for journal/conference reviewing Size and quality of conference, conference sessions, panels, workshops. Journal impact factor (as a measure of journal quality) Recognition from professional groups and societies Being asked to serve field/profession repeatedly and in different capacities Leadership roles in conferences, professional societies, task forces
To Local/Regional Community	<ul style="list-style-type: none"> Volunteer work in support of the local community, e.g., schools, social service agencies, community-building organizations, other kinds of organizations Pro bono consulting and assistance to people and agencies in local community Work in local government (e.g., serve on town committee) 	<ul style="list-style-type: none"> Contributions are valued by community organizations – testimonials provided Long term engagement with organization and repeated invitations to work together Contributions to community are measurable and recognizable

C&S Contribution Area	Examples of Citizenship and Service Contributions	Impacts/Measures of Citizenship and Service Contributions
To Home Department, Program, and/or School	<ul style="list-style-type: none"> New Faculty Search Committees Staff Search Committees Ad hoc Department/Program/School Task forces Departmental or Program Committees – curriculum, accreditation, UG, G, Tenure Committee, PhD Committee, etc. Special events for student and student organizations in schools/departments – e.g., panels, dinners, workshops, open houses/recruitment Program Directors 	<ul style="list-style-type: none"> New faculty/staff are hired successfully Recommendations from Ad hoc Department/Program/School Task forces and Committees are made, considered and (sometimes) adopted Evidence of leadership activity, e.g., Chair, Liaison, Coordinator, Voluntary “beyond the call of duty” contributions Departmental service awards Program initiatives created, number of students enrolled, etc.
To WPI Community	<ul style="list-style-type: none"> Campus-wide Search Committees – for DHs, administrators, senior staff Ad hoc University-wide Task forces University-wide Committees – COG, CTAF, COAP, FAP, CAP, etc. University Panels, e.g., NFO, STEM Faculty Launch Insight Advising program WPI Mentoring Program (New Faculty, Associate Faculty, Mutual Mentoring) Advisor to student clubs, fraternities/sororities, academic groups Service to accreditation and quality of life at WPI, e.g., ABET, AACSB, AAUP, honorary societies 	<ul style="list-style-type: none"> New administrators and senior staff are hired successfully Recommendations from Ad hoc University-wide Task forces are made, considered, and (maybe) adopted University-wide Committees complete their work Evidence of leadership activity, e.g., Chair, Liaison, Coordinator, Voluntary “beyond the call of duty” contributions Trustee’s service awards

SERVICE MATRIX