

YEAR 4 EXTERNAL EVALUATION

OREGON STATE UNIVERSITY ADVANCE-IT

NSF GRANT No. 1409171

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1. EXECUTIVE SUMMARY

This report presents the findings of an external evaluation of Oregon State University's ADVANCE-IT grant, covering the period generally corresponding to the grant's fourth year of funding. The ADVANCE-IT grant is designed to be a catalyst for advancing the study and practice of equity, inclusion, and justice for women and others from historically underrepresented faculty groups in the STEM and SBS academy. The signature program of OSU ADVANCE is the 60-hour seminar that introduces participants to systems of oppression theory and difference, power, and discrimination concepts; challenges existing ideologies and stereotypes; and offers alternative and inclusive understandings of the relations of power and privilege in STEM to institutionalize equitable, inclusive, and just practices in the academic workplace.

The three main objectives of the grant and related outcomes are detailed below.

Objective 1. Recruitment and Promotion – Influence academic recruitment and promotion policies and practices to assure equitable, inclusive, and just advancement

The ADVANCE Seminar (including the action plans) and the work of the Faculty Fellows has catalyzed changes in the recruitment processes with respect to search committee practices and accountability by deans for ensuring the process was equitable, inclusive, and just. Administrators were motivated to utilize available resources, such as Search Advocates, to support their goals.

“Toolkit” data indicate that there have been positive gains in women's representation among new hires over the grant period. During grant Years 2-4, the average percent of women hired in STEM and SBS increased over the baseline at each rank where hiring took place. In STEM, the percentage of women hired as assistant professors increased from an average of 29% in the baseline to an average of 46% in grant Years 2-4. During that same time period, the percentage of STEM women hired increased from 48% to 81% for associate professors and from 24% to 62% for full professors. In SBS, the percentage of women hired as assistant professors increased from 48% to 81% during this same time period and all three hires made at the associate professor level during grant Years 2-4 were women. (No full professors were hired in SBS during this period.)

The impressive hiring gains are consistent with reported efforts by administrators (guided by their participation in the ADVANCE Seminar) to focus on search committee practices and procedures. They are also sharing best practices within and across units to maximize impact. Many have reported a growing desire to improve tenure and promotion processes as well, but this area is still developing and the internal evaluator has identified gaps in shared knowledge across P&T committee members. Data on tenure and promotion should continue to be monitored and utilized to help units identify and attend to any potential areas of disparity.

Objective 2. Institutional Climate – Contribute to an institutional climate that reflects a shared value for equity, inclusion, and justice

Analyses conducted by the internal evaluator reveal that readiness to take action pertaining to issues of equity, inclusion and justice has increased along all dimensions of institutional transformation. Findings from climate surveys and interviews conducted by the external evaluator also indicate that there is strong support for equity, inclusion, and justice among university leadership and that this support is essential for a positive institutional climate.

The recent loss of many female administrators has been a source of concern and uncertainty for stakeholders that some report may negatively impact climate. The recent turnover in leadership also reinforces the need for continuation of the ADVANCE Seminar. Stakeholders have noted that participation by leadership has been essential to institutional change. Since some degree of administrative turnover will always be present, there is an ongoing need for the seminar for bringing new leaders on board and educating them to be facile in the language and actions of equity, inclusion and justice.

Objective 3. Awareness and Actions – Provoke faculty and administrators’ personal awareness of difference, power, and discrimination in the academy and actions that contribute to equitable, inclusive, and just treatment

Data indicate that since its launch in June 2015, the ADVANCE Seminar is effectively increasing participants’ awareness of difference, power, and discrimination concepts and inspiring participants to act. University leadership has continued to participate in the seminar, including the new provost, new Chief Diversity Officer, two deans, and four associate deans in Year 4. Their participation is particularly important because they can recommend and implement policy changes, can direct others to act, and because their support lends legitimacy to the seminar activities. The seminar also provides a common vocabulary that supports conversations and actions; the shared vocabulary is especially effective in catalyzing movement toward these goals because so many members of the campus community have participated in the seminar.

The OSU ADVANCE social science research project is investigating the degree to which participating in the ADVANCE Seminar motivates institutional leaders and faculty to actively contribute to campus climate transformation. The team has conducted more than 200 in-depth interviews and will begin the quantitative analyses in Summer 2018. The empirical study will be an important method of disseminating the impact to other institutions as a possible mechanism for supporting institutional transformation. The dissemination of the social science research is essential to achieve the grant’s intellectual merit and broader impacts.

Conclusion and Recommendations

OSU ADVANCE has made impressive progress in the areas of recruitment and actions to support inclusive, just, and equitable practices and outcomes for women faculty. The average percent of women hired in STEM and SBS increased in Years 2-4 over the baseline

for each rank where hires were made. The ADVANCE Seminar has made a positive impact on institutional climate in the areas of diversity and inclusion and has been well attended by faculty and by university leadership.

During the final year of grant funding, there should be added focus on sustainability and on disseminating findings from the social science research and best practices.

Key recommendations:

Evaluation:

- Work with the internal and external evaluators to:
 - Identify priorities for evaluation based on findings from the internal and external evaluator
 - Discuss the summative evaluation and ensure all necessary data is being collected, including a timeline for collection and analysis
 - Focus efforts in Year 5 to summarize impacts to date, including the areas of recruitment and promotion, documenting how practices and policies have changed in alignment with OSU ADVANCE initiatives
- Hiring has been an area of significant impact; seek data on the composition of applicant pools and finalists for faculty positions for analysis

Climate:

- Provide opportunities for women faculty to develop their leadership skills and assume leadership positions
- Focus efforts on ensuring the promotion and tenure processes support just, inclusive, and equitable practices

Sustainability:

- Add deans to the IAC; their engagement is essential for sustainability
- Embed systems of accountability within the action plans and work of the Faculty Fellows
- Continue to support mechanisms to share best practices across units and institution-wide
- Proceed with plans to work with Provost Feser to vet a sustainability plan that will provide sufficient funding and mechanisms to continue the key initiatives (ADVANCE Seminar, Faculty Fellows, ADVANCE Journal) and personnel

Dissemination beyond OSU:

- As research findings become available, disseminate through publications and presentations to maximize the grant's broader impacts and intellectual merit
- Consider adjusting workload to support the social science research, as the dissemination of findings is a priority as the grant nears completion
- Proceed with plans to offer Train the Trainer workshops to faculty and administrators from other institutions

2. INTRODUCTION

2.1 Organization of the Report

This report describes external evaluation findings pertaining to Year 4 of the Oregon State University (OSU) NSF ADVANCE-IT grant. The report is divided into several sections. Following this introduction, Section 2.2 provides a brief overview of the major goals of the OSU ADVANCE grant, and Section 3 describes the evaluation objectives and methods. Section 4 summarizes the key activities undertaken in Year 4 of the grant. Section 5 provides evidence of impact, summarizing the ADVANCE Indicators Toolkit data as it pertains to overall program goals, key findings from the internal evaluation report, and evidence of impacts derived from interviews conducted by the external evaluator. Progress toward the three program objectives is summarized in Section 6. The report concludes with key recommendations, presented in Section 7.

2.2 Summary of Oregon State University ADVANCE

Oregon State University is completing the fourth year of their five-year NSF ADVANCE-IT grant. The grant seeks to serve as a catalyst for advancing the study and practice of equity, inclusion, and justice for women and others from historically underrepresented groups who are faculty in the academy (STEM and SBS specifically), at three levels of influence: personal, symbolic, and institutional. The centerpiece program, the ADVANCE Seminar, was adapted for STEM senior faculty and administrators from the university's Difference, Power, and Discrimination (DPD) Seminar. The 60-hour ADVANCE Seminar introduces participants to systems of oppression theory and difference, power, and discrimination concepts; challenges existing ideologies and stereotypes; and offers alternative and inclusive understandings of the relations of power and privilege in STEM to institutionalize equitable, inclusive, and just practices in the academic workplace.

The three main objectives of the grant include:

1. **Recruitment and Promotion**—Influence academic recruitment and promotion policies and practices to assure equitable, inclusive, and just advancement
2. **Institutional Climate**—Contribute to an institutional climate that reflects a shared value for equity, inclusion, and justice
3. **Awareness and Actions**—Provoke faculty and administrators' personal awareness of difference, power, and discrimination in the academy and actions that contribute to equitable, inclusive, and just treatment

Key activities (described in Section 4) to support progress toward the main objectives include:

- ADVANCE Seminar

As the centerpiece of the project, the 60-hour ADVANCE Seminar is an interactive

learning experience for faculty and administrators that focuses on analyzing the operations of difference, power, and privilege in higher education with particular attention to STEM disciplines

- Faculty Fellows

One-year ADVANCE Faculty Fellowships support the work of tenure-line faculty to embed equity, inclusion, and justice throughout the university

- Institutional Awareness and Capacity-Building

- Sponsored Events

Partner with other OSU stakeholders to sponsor events and speakers addressing injustice, inclusivity, and equality

- Roadshows

Presentations at key faculty and administrative meetings designed to raise awareness of equity, inclusion, and justice issues, with a focus on women in STEM

- Influencer Dialogues

Targeted conversations with top administrators build communities, context and structures for support of equity, inclusion, and justice in faculty recruitment, retention, promotion, and advancement

- ADVANCE Journal

The proposed ADVANCE Journal will be an online peer-reviewed, open-access journal that will provide a forum for dissemination of ADVANCE-related research and content

- Social Science Research

Using a mixed-methods approach, the primary research question is: Will participating in the ADVANCE Seminar empower and motivate institutional leaders and faculty members to actively contribute to campus climate transformation?

Key hypotheses include:

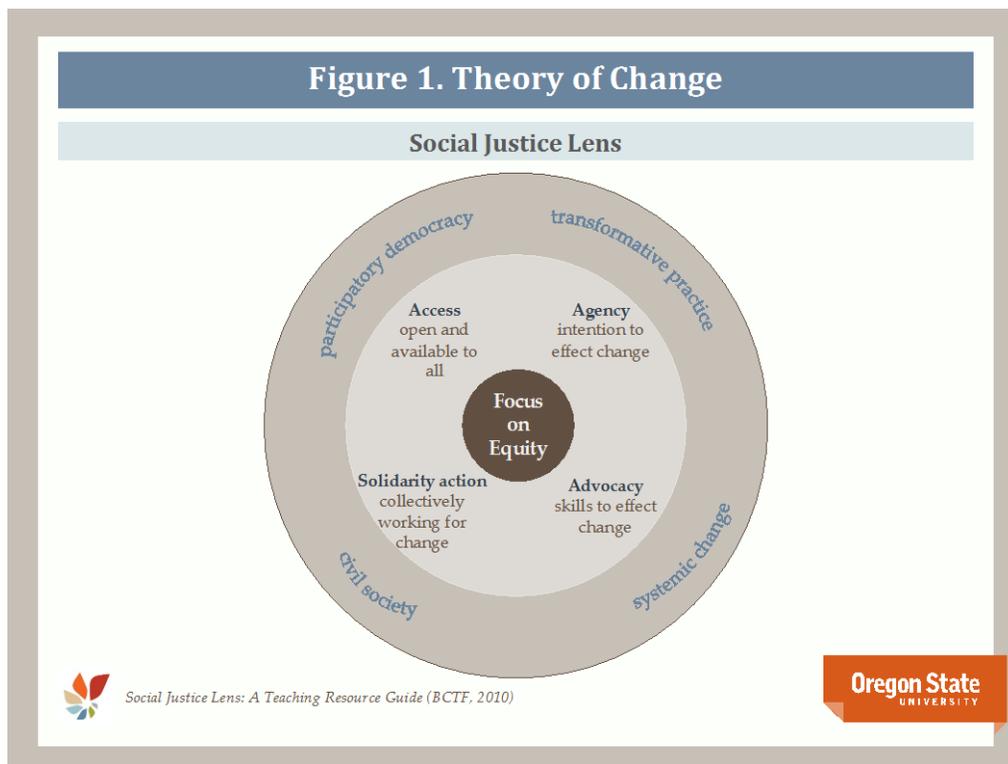
1. Women STEM faculty who complete the ADVANCE Seminar will:

- a. have greater awareness and understanding of the power relationships in which they are immersed than similarly situated women STEM faculty who did not participate
- b. report a greater sense of efficacy in managing professional interactions and challenging structural/cultural barriers than similarly situated women STEM faculty who did not participate

2. Men and women STEM faculty who identify along social identity categories that are centered in US culture (e.g., white, able bodied, straight) will:
 - a. have a higher level of awareness and understanding of relational power, and a greater appreciation of what is involved in building authentic alliances across difference after completing the seminar relative to their peers who did not participate
 - b. take more explicit actions to foster positive and affirming faculty interactions across difference after completing the seminar relative to their peers who did not participate

Theoretical Framework:

The project is guided by two theoretical frameworks. A four component social justice lens will be applied with a focus on equity and inclusion, measured as proximal (individual) changes: access, agency, advocacy, and solidarity action, through distal (institutional) processes: participatory democracy, civility, transformative practice, and systemic change (Figure 1, courtesy of OSU ADVANCE).



The Transtheoretical Model will be used to assess individual-level change at six readiness levels and the Community Readiness Model will be used to assess institutional-level change at nine readiness levels and across six dimensions (Figures 2 and 3, courtesy of OSU ADVANCE).

Figure 2. Theory of Change, cont.

Individual Level Change



Transtheoretical Model (Prochaska & DiClemente, 1983)

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Figure 3. Theory of Change, cont.

Institutional Readiness Framework

Six Dimensions of Readiness	Nine Levels of Readiness
Current institutional efforts	No awareness
Community knowledge about efforts	Denial/ Resistance
Leadership	Vague awareness
Institutional climate/ attitude	Preplanning
Knowledge about the Issue	Preparation
Resources related to the issue	Initiation
	Stabilization
	Confirmation/ expansion
	Professionalization/ ownership



Adapted from Community Tool Box (University of Kansas, 2014)

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3. EXTERNAL EVALUATION OBJECTIVES AND METHODS

3.1 Structure of Evaluation Responsibilities, Evaluation Period and Objectives

Evaluation activities were undertaken by internal and external evaluators. Dr. Deborah John, Associate Professor, School of Biological and Population Health Sciences, is the internal evaluator. Dr. Mariko Chang, President of Mariko Chang Consulting, Inc., is the project's external evaluator. The internal and external evaluators are providing separate reports to the project team, but information from the internal evaluation report have been incorporated into the external evaluation (see section 3.2).

The goal of the external evaluation is to assess the extent to which OSU ADVANCE is meeting the program goals and objectives, including its intellectual merit and broader impacts for all program components. A final summative evaluation report will be provided at the end of the grant.

The external evaluation activities described in this report address the period between May 2017 and June 2018, generally encompassing the grant's fourth year of funding.

Evaluation objectives for this annual report are primarily formative and include:

- describing implementation activities, successes, and challenges;
- monitoring the status of implementation progress toward program goals;
- documenting impacts of the program activities to date;
- providing formative feedback to facilitate project refinements; and
- enhancing communication among the leadership team and stakeholders.

3.2 External Evaluation Methods and Data

This external evaluation incorporates both quantitative and qualitative data derived from the sources described below.

Interviews: Dr. Chang conducted phone interviews in July and August 2018 with the following stakeholders: the principal investigator (PI), the co-PIs, the research team, the provost, the president, the project manager, Faculty Fellows, ADVANCE Seminar participants, Internal Advisory Council members, deans, department heads, and other key institutional partners. A total of 25 people were interviewed for this report.

Internal Evaluation Report: Dr. John produced a midterm internal evaluation report that was provided to the OSU ADVANCE team and the external evaluator. In addition to the internal evaluator's assessment of progress and impacts, the report contains data from the following sources:

Climate Survey: Findings from the 2014 and 2016 institutional climate survey presented key indicators of institutional climate.

Toolkit Data: Trends in women’s representation at the university (the proportion of women in tenure track faculty positions in STEM and SBS were presented.

Activity Artifacts and Interview Transcripts: The internal evaluator analyzed data (both qualitative and quantitative) derived from project communication, event/participant survey data from key events, action plans of seminar participants, and other project artifacts. The internal evaluator also conducted and analyzed data from interviews.

Institutional Data: Department-level data on STEM/SBS faculty composition (such as the number of faculty by rank and gender) and other ADVANCE Indicators Toolkit data were provided by the OSU ADVANCE team to the external evaluator.

Program Documentation: The OSU ADVANCE team provided the external evaluator with additional program documentation including reports, records of ADVANCE activities, and participation in programming.

4. SUMMARY OF YEAR 4 ACTIVITIES

4.1 ADVANCE Seminar

The signature program of OSU ADVANCE is the 60-hour seminar that introduces participants to systems of oppression theory and difference, power, and discrimination concepts; challenges existing ideologies and stereotypes; and offers alternative and inclusive understandings of the relations of power and privilege in STEM to institutionalize equitable, inclusive, and just practices in the academic workplace. In the seminar, participants learn how to:

- Analyze how difference (gender, race, social class, sexual identity, age, ability, religion) works in higher education;
- Explain how difference works at OSU and in their units, and;
- Critically evaluate STEM cultures through lenses of difference.

The ADVANCE Seminar is also the focus of the Social Science Research (section 4.5), which examines the effectiveness of the seminar as a mechanism of institutional transformation. The findings of the Social Science Research will also therefore contribute to the evaluation of the seminar’s impact.

In grant Year 4, two seminars were held (August-September 2017 and June 2018). The new provost, new Chief Diversity Officer, two deans and four associate deans all completed the seminar in Year 4. To date, the team has held 8 seminars, attended by 110 administrators and faculty and one additional cohort with 13 participants from University Relations and Marketing.

A critical component and outcome of the seminar is the creation of individual action plans by the participants. The action plans are an opportunity for participants to apply the knowledge gained in the seminar to create change within their own units or spheres of influence.

4.2 Faculty Fellows

The Faculty Fellows program began in Fall 2016. Not in the original proposal, the Fellows Program was added to extend the reach and impact of the grant and to engage additional stakeholders in the work of the grant. The one-year Fellows Program was designed to provide opportunities for ADVANCE Seminar participants to further initiatives within their own colleges that were congruent with the objectives of OSU’s ADVANCE Program. Based on feedback from the NSF third year site visit, the most recent cohort of fellows will analyze the effectiveness of the action plans within their respective colleges and suggest ways to align and strengthen efforts. The fellows will be brought together to share assessments and share best practices in fall 2018.

To date, 13 faculty and administrators have served as fellows (5 in 2016-17 and 8 in 2017-18; see Table 1). The fellows represent a range of STEM disciplines and almost all are tenured faculty or administrators. While all 5 fellows in the first cohort were women, men comprised half of the 8 fellows in the second cohort.

Table 1. Characteristics of Faculty Fellows by Cohort

	2016-17	2017-18
College		
STEM	4	6
SBS	-	-
Other (including administration)	1	2
Rank		
Professor	3	2
Associate Professor	1	3
Assistant Professor	1	1
Administrator	-	2
Gender		
Female	5	4
Male	-	4
TOTAL Number	5	8

4.3 Institutional Awareness and Capacity-Building

In addition to the ADVANCE Seminar and work of the Faculty Fellow, the team engaged in ongoing activities to raise awareness of equity, inclusion and justice issues, build

institutional support for the goals of OSU ADVANCE, and build capacity for institutional transformation. The following activities were undertaken:

- 1) Sponsored Events - Partner with other OSU stakeholders to address injustice, inclusivity, equality, and build personal capacity to promote transformative practices;
- 2) Roadshows - Presentations at key faculty and administrative meetings designed to raise awareness of equity, inclusion, and justice issues, with a focus on women in STEM; and
- 3) Influencer Dialogues - Targeted conversations with top administrators to build communities, context and structures for support of equity, inclusion, and justice in faculty recruitment, retention, promotion, and advancement.

In grant Year 4, OSU ADVANCE co-sponsored two events with the College of Engineering and one with University Relations and Marketing. These events included a production of a play, *Spinning into Butter*, that explores racism and political correctness prevalent in higher education, a public lecture and workshops with Dr. Tricia Rose (Chancellor's Professor of Africana Studies, Associate Dean of the Faculty for Special Initiatives and Director of the Center for the Study of Race and Ethnicity in America at Brown University), and a talk with Punam Mathur (former SVP of Corporate Diversity and Community Affairs from MGM Resorts) that addressed creating an organization culture centered on diversity, equity and inclusion.

Roadshows and Influencer Dialogues continued in grant Year 4 as well. The OSU ADVANCE leadership team has engaged in more than 200 influencer dialogues.

4.4 ADVANCE Journal

The mission of the ADVANCE Journal is to provide a forum in which to publish peer-reviewed scholarship related to ADVANCE programs and outcomes, including scholarly research articles addressing empirical, theoretical, and conceptual work, program evaluation and assessment reports, critical reviews of the literature and resources, and letters to the editor.

The online, open access journal was launched in October 2017 at the Association of Women in Science ADVANCE/GSE conference. Two peer-reviewed papers and one essay have been published to date, with three articles currently under peer review. The main challenge is obtaining enough submissions. One stakeholder interviewed suggested soliciting people directly and asking them to submit pieces.

The ADVANCE Journal is a key outcome and is expected to assist the broader ADVANCE community with disseminating research, sharing best practices, and stimulating dialogue about structural and institutional transformation. In interviews, stakeholders also mentioned the ADVANCE Journal brings visibility to OSU, demonstrating their leadership in these areas.

4.5 Social Science Research

The social science research uses a mixed-methods approach to empirically test whether participating in the ADVANCE Seminar empowers and motivates institutional leaders and faculty members to actively contribute to campus climate transformation. The methodology includes validated survey instruments (the Intercultural Development Inventory, or IDI, and the CQ Cultural Intelligence Scale) and intensive interviews (surveys and interviews each have a pre- and post- component). Data are collected for seminar participants and also a comparison group (an intentionally-chosen group with similar characteristics as the experimental group) who have not participated in the seminar.

The team has actively been collecting data. A total of 82 seminar participants and 44 comparators have agreed to participate in the study (for a total of 126 individuals). The team has completed 231 in-depth interviews so far and is actively analyzing the interview data.

With a mountain of data, the team is doing its best to work through the analyses. Initially, they faced challenges in terms of the ability to transcribe so many interviews, which they have resolved by using an external transcription service. A second challenge has been the codes to match participants for the pre-post surveys and interviews were not working effectively (participants generated their own codes based on information that was unique and consistent, but people still gave different codes in each time point). The team has been working through these challenges and plans to begin the quantitative analyses in summer 2018.

The social science research is also essential for empirically assessing the seminar's impact and is a critical component of the grant's intellectual merit and broader impacts.

5. EVIDENCE OF IMPACT

5.1 Summary of Findings from Institutional “Toolkit” Data

Key indicators of the status of women faculty in STEM and SBS have been collected as part of the Indicators Toolkit data and provided to the external evaluator. Data on STEM and SBS women's representation overall, as well as among those hired, leaving the university, and being promoted are summarized in this section. These measures provide an important indicator of change pertinent to the grant's goals.

Baseline data for the composition of STEM and SBS women faculty by rank refer to Fall 2014 (Year 1 of the grant). For other data that fluctuate more from year to year and/or have small sample sizes (new hires, attrition, tenures, promotions), baseline data are aggregated across the most recent 3-5 academic years (based on data availability) to level out the annual variation. For the purposes of comparison, baseline data that covers multiple years is

averaged across all baseline years in this report. Year 2 data include data in the 2015-2016 period, Year 3 data covers 2016-2017, and Year 4 2017-2018.

Changes occurring over the grant period in these measures provide a useful metric for examining the impact of activities upon the grant objectives, particularly the objective to increase the number of women STEM faculty that are equitably and justly recruited, supported, retained, and promoted. These data are also useful for understanding the demographic changes that impact climate and culture broadly at OSU.

5.1.1 Composition of STEM and SBS Faculty by Gender and Rank

The percentage of women tenured/tenure-track STEM faculty increased from 23% in the baseline year to 27% in Year 4 (Table 2). The total number of women faculty also increased from 156 to 184 with most of that increase at the rank of assistant professor. Also, the number of men in STEM fields dropped by 27 (from 517 to 490)¹ from baseline to Year 4, which contributed to the growth in the percentage of women during this time period. The percent of women at the rank of full professor increased slightly from 21% at the baseline to 22% in Year 4.

Compared with women in STEM fields, the percent of women in SBS fields remains much more balanced between the genders, from 47% at the baseline and 51% at Year 4. In SBS fields across all three ranks there were seven more women Y4 than in baseline, with the increases focused at the rank of associate professor.

Table 2. Number and Percent Women Tenure-Track Faculty in STEM and SBS.

	Number of Women				Percent Women			
	Asst.	Assoc.	Full	Total	Asst.	Assoc.	Full	Total
STEM								
Baseline (2014)	47	44	65	156	31%	22%	21%	23%
Year 2 (2015)	54	48	66	168	32%	23%	21%	25%
Year 3 (2016)	67	48	67	182	36%	25%	22%	27%
Year 4 (2017)	67	48	69	184	37%	27%	22%	27%
SBS								
Baseline (2014)	13	13	10	36	46%	45%	50%	47%
Year 2 (2015)	14	15	10	39	45%	52%	45%	48%
Year 3 (2016)	14	16	10	40	48%	55%	43%	49%
Year 4 (2017)	14	18	11	43	54%	58%	41%	51%

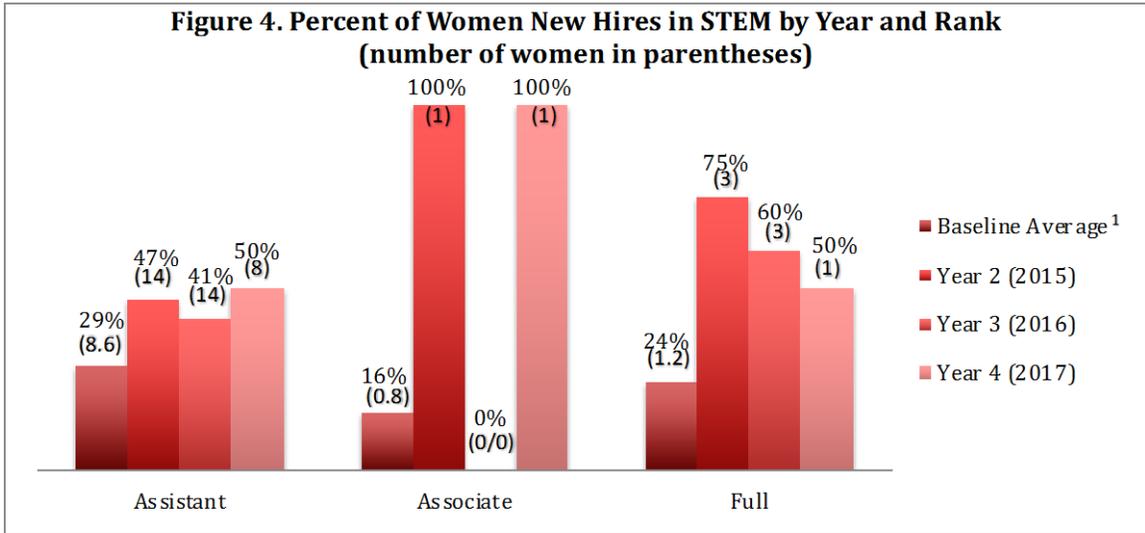
5.1.2 Recruitment of Women STEM and SBS Faculty

The percentage of new hires in STEM who were women increased in all three ranks from baseline to Year 4, from 27% to 53%, respectively (data not shown). The percent

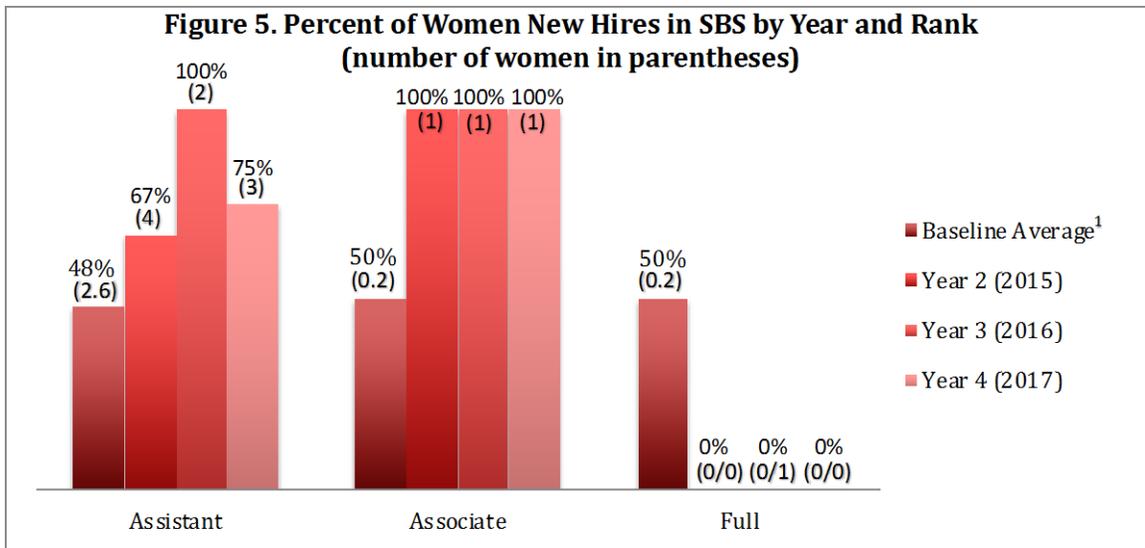
¹ Data not shown; data from Table 1 of the Year 1 and Year 4 “Toolkit Data.”

of women among new hires increased over the baseline period in each of the grant Years (Year 2-4) in which hires were made (Figure 4).

In SBS, women’s representation among new hires increased over baseline for both assistant and associate professors during grant Years 2-4 (Figure 5). Only one full professor (a man) was hired in SBS during Years 2-4.



¹Baseline data were averaged across all five years of baseline data (2010-2015).



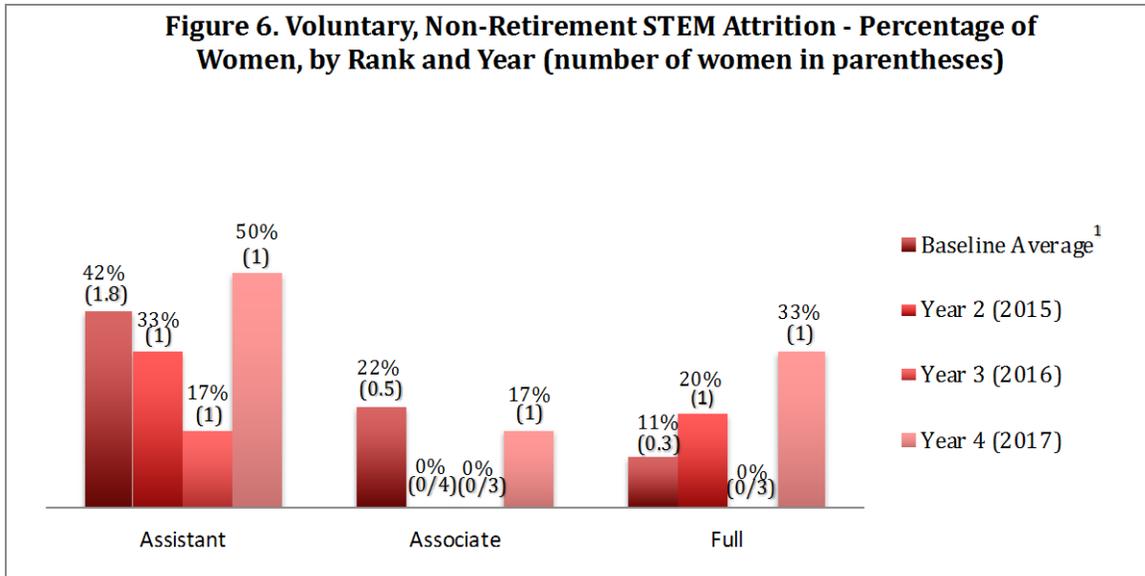
¹Baseline data were averaged across all five years of baseline data (2010-2015).

5.1.3 Retention of Women STEM and SBS Faculty

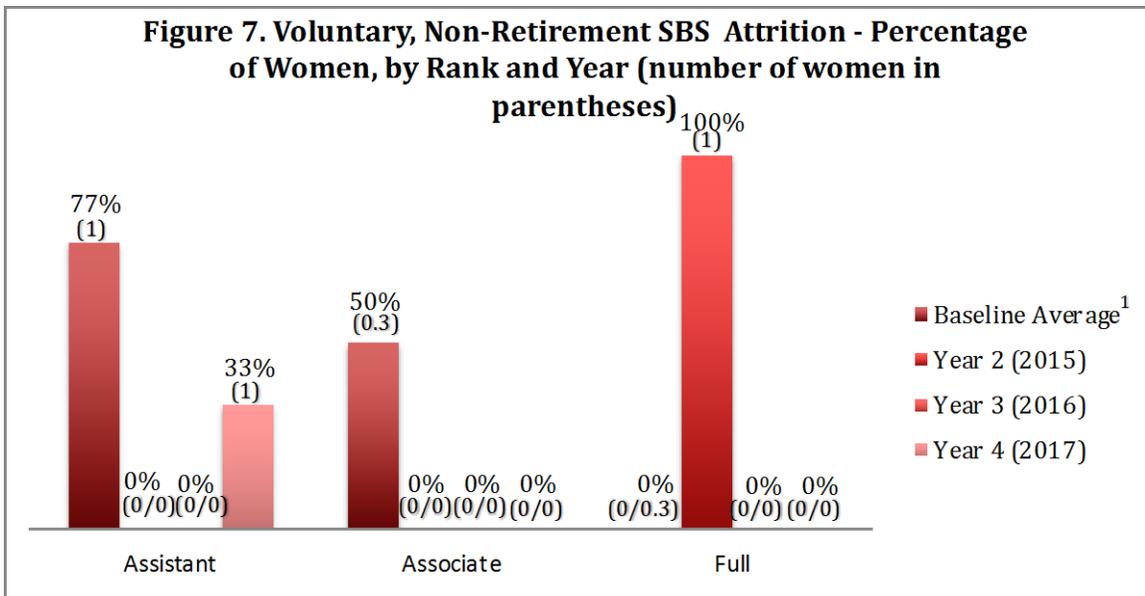
Of the six STEM women left OSU during grant Years 2-4, half were assistant professors (Figure 6). As a function of the total numbers of women and men who are assistant

professors in Year 4 (Table 1), rates of attrition are slightly higher for women in STEM (1/67=1.5% for women; 1/112=0.9% for men) and for full professors (1/69=1.4% for women; 2/246=0.8% for men), but slightly lower for women associate professors (1/48=2.1% for women; 5/132=3.8% for men).

In SBS, 2 women left during grant Years 2-4, one assistant and one full professor (Figure 7). In contrast 3 male assistant professors left during Years 2-4. Due to such small numbers, it would be challenging to make broad conclusions, but data should continue to be monitored to see if patterns emerge over time.



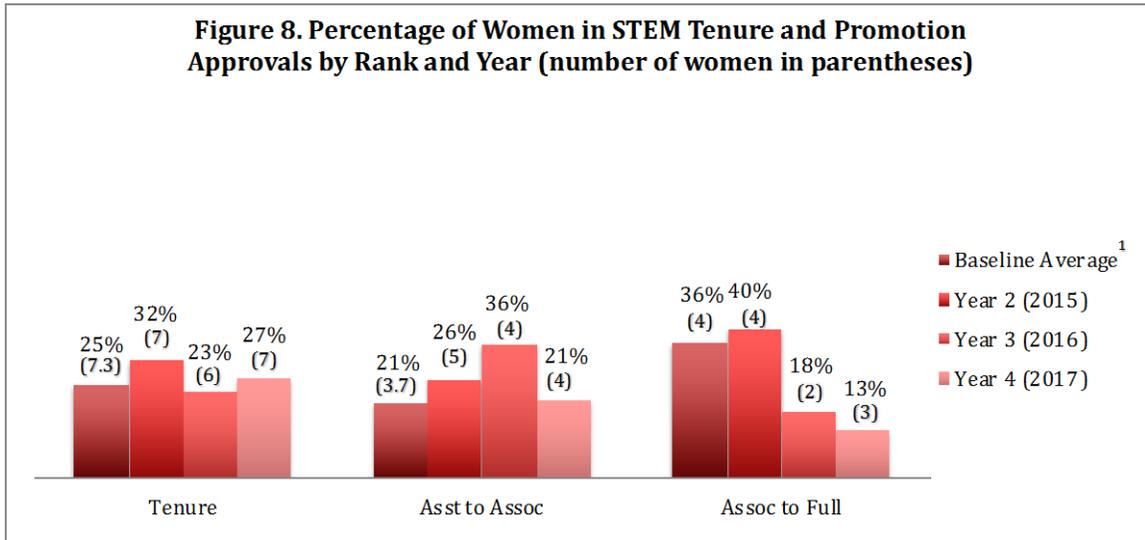
¹Baseline data were averaged across all four years of baseline data.



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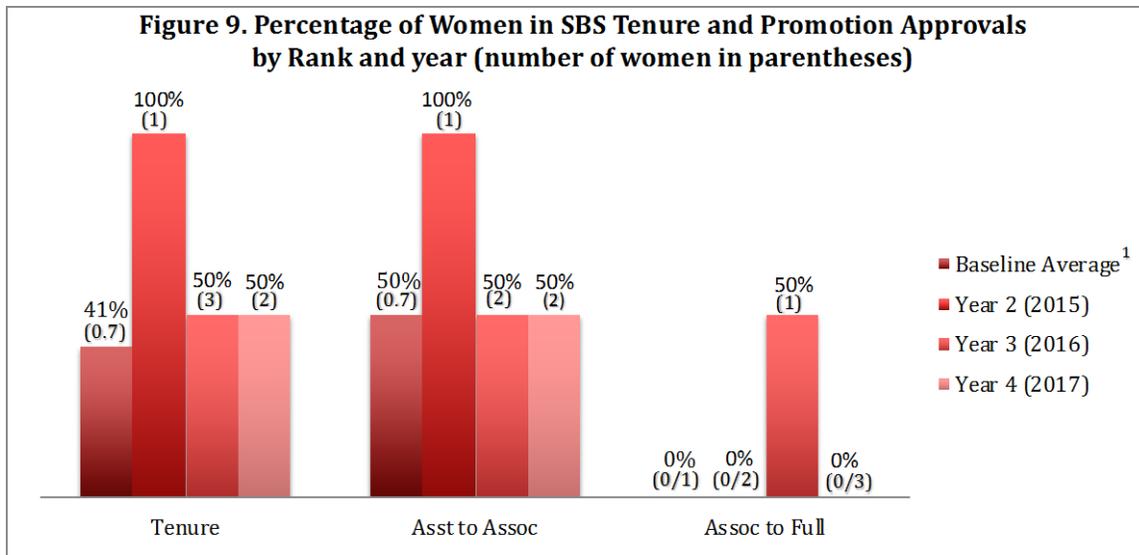
5.1.4 Promotion and Tenure of Women STEM and SBS Faculty

The number of women STEM faculty awarded tenure and promoted from assistant to associate professor has remained fairly steady during grant Years 2-4, although the percentage has changed slightly over this time period (Figure 8). The only STEM tenure denial was for a woman (data not shown), although numbers are very small and should be very cautiously interpreted. At the point of promotion from associate to full professor, the percent of STEM women among those promoted has declined during grant Year 3 and 4. This decrease is attributable to the increased number of men receiving promotion to full professor, from a baseline of 7 men to 20 men in Year 4.



¹Baseline data were averaged across all three years of baseline data.

The numbers for tenure and promotion in the SBS fields is very small for both women and men (Figure 9). Taking those small numbers into consideration, the percentage of tenure approvals given to women has increased slightly from 41% at baseline to 50% in Year 4. Promotions from assistant to associate professor have remained the same at 50%, while no women were promoted from associate to full professor in Year 4. There was one SBS faculty man who received a promotion denial in Year 4 (data not shown), and there were no denials in Year 3.



¹Baseline data were averaged across all three years of baseline data except for associate to full where only one year of data were available for baseline.

5.1.5 Summary of Baseline with Years 2-4 Data Indicators

Figures 10 through 15 summarize the percent of women, percent hired, percent attrition, and percent women tenured and promoted in STEM and SBS fields for each of the three ranks during the baseline period and the average of Years 2-4.

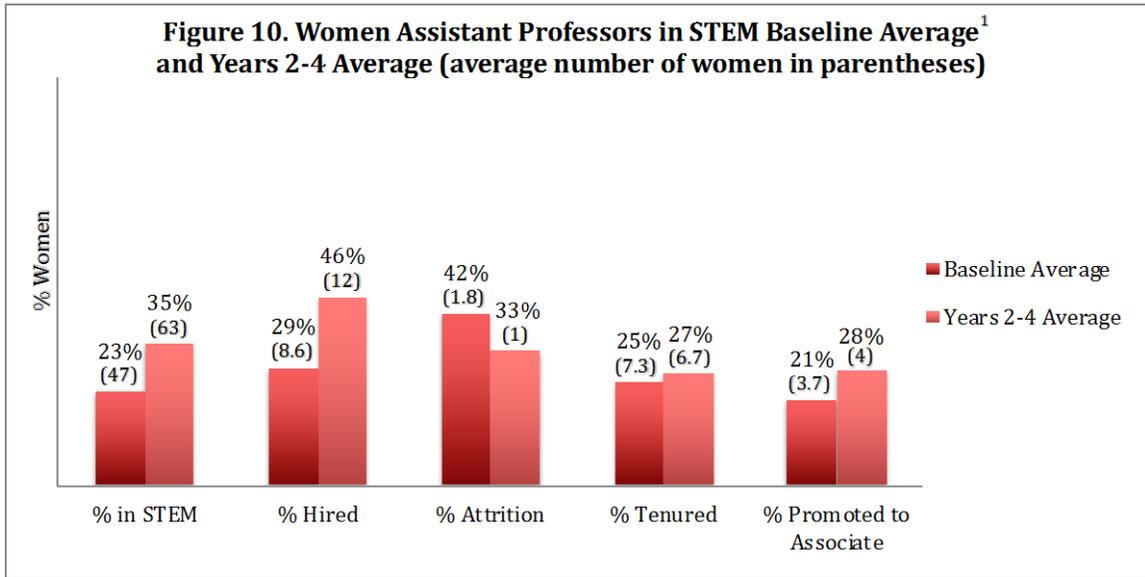
There is a significant increase in the percent of women in STEM at the assistant professor rank, from 23% at baseline to 35% in Years 2-4. In SBS the largest percentage increases in women's representation is among associate professors, from an average of 13 or 45% at baseline to 16 or 55% in Years 2-4.

The average percent of women hired in STEM and SBS fields increases in Years 2-4 from baseline at each rank, with the exception of full professors in SBS where no hires were made during this period.

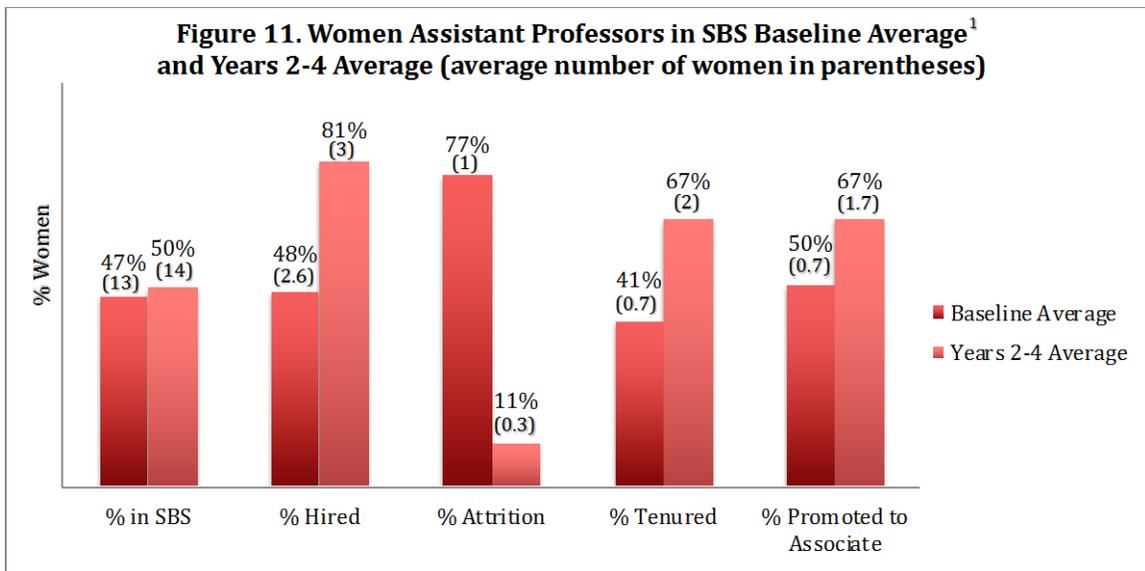
Attrition is small for both women and men in STEM and SBS. In Year 4, male associate professors had the highest rate of attrition at 5 of 132 or 3.8% (data not shown). Attrition rates for women in STEM remained the same at the associate professor level compared to Year 3, but increased slightly for associate and full professors. Overall, the attrition rate for female and male STEM faculty was equal in Year 4 (1.6%). For SBS fields, there was no attrition in Year 3 and only three faculty left in Year 4 (one female assistant professor and two male assistant professors).

As a percentage, women's representation among those tenured increased slightly in Years 2-4 from the baseline in STEM (25% at baseline and 27% in Years 2-4) and SBS (41% at baseline and 67% in Years 2-4). Promotions from assistant to associate also increased for women in STEM and for SBS, though the numbers are small for both: an average of 3.7 (21%) at baseline and 4 (28%) in Years 2-4 in STEM, and 0.7 (50%) at baseline and 1.7

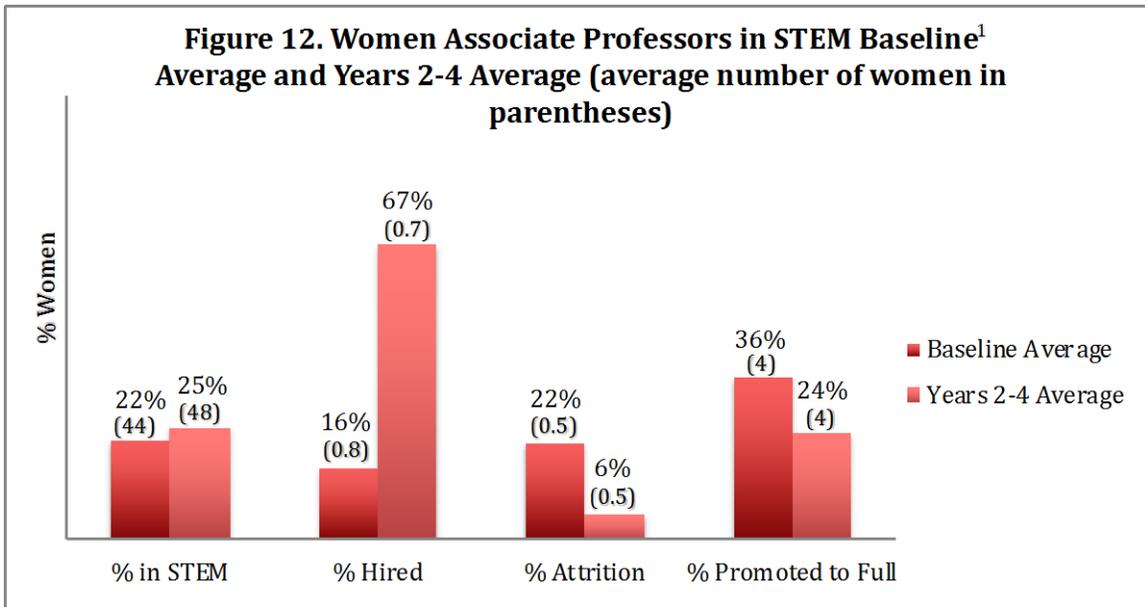
(67%) in SBS. The numbers of women promoted to full professor in STEM remained unchanged at 4 women between the baseline and the Year 2-4 average, but decreased as a percentage of all promotions, from 36% at baseline to 24% Years 2-4. SBS saw a slight increase, from 0 to 17%, representing one woman promoted to full professor in Years 2-4. During that same period, 6 men were promoted to full professor.



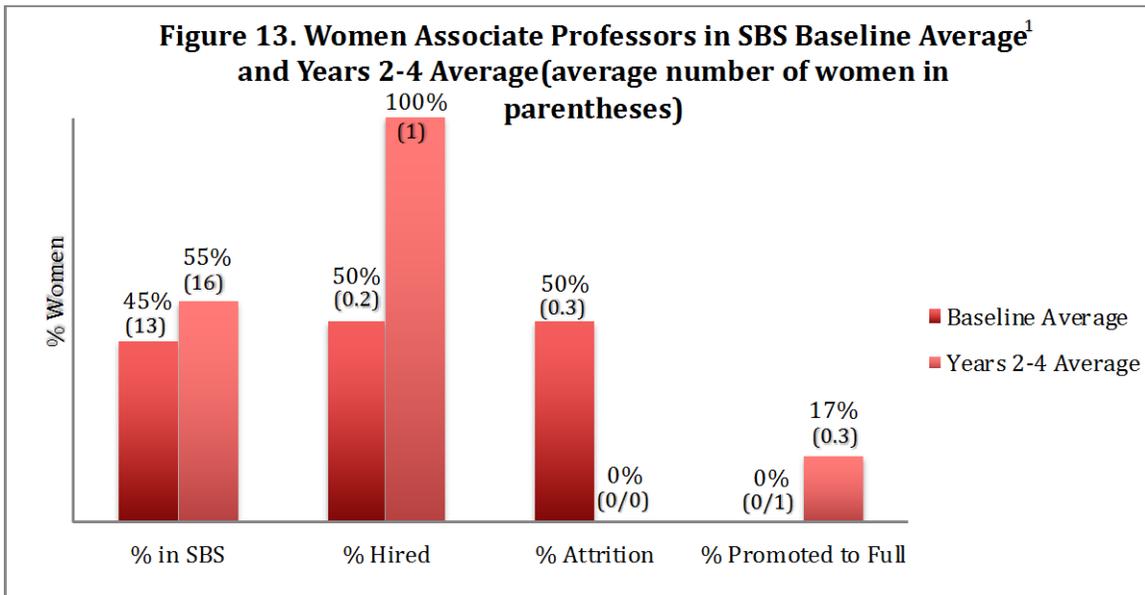
¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.



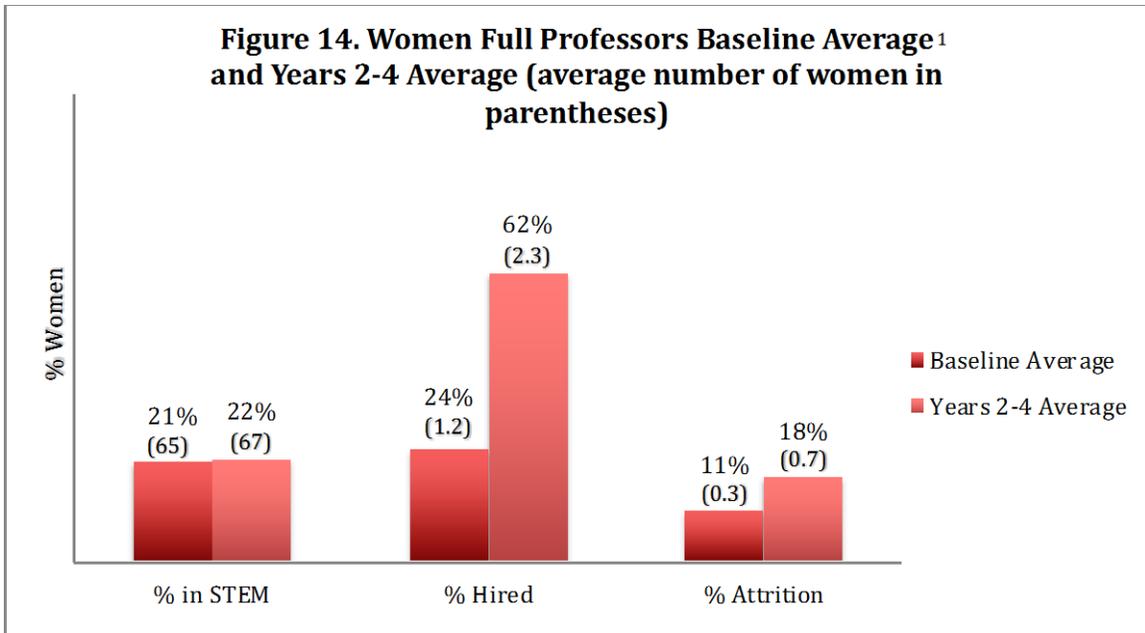
¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.



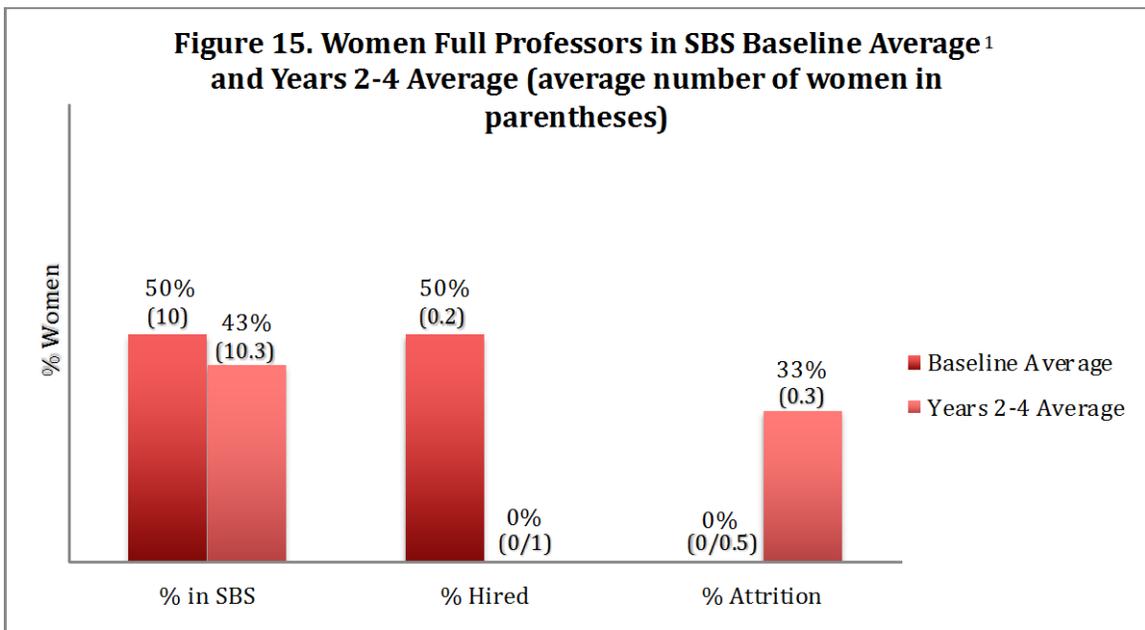
¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.



¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.



¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.



¹Baseline data for “Hired” were averaged across all five years of baseline data (2010-2015); for “Attrition” were averaged across all four years of baseline data; and for “Tenured” and “Promoted to Associate” were averaged across all three years of baseline data.

5.2 Summary of Main Findings from the Internal Evaluation

The internal evaluator provided a report to assess progress at the grant's midpoint (Fall 2017). Grounded within the project's theoretical framework, the internal evaluation is addressing the following two questions:

1. How do voluntary and repeated exposures to OSU ADVANCE contribute to institutional members' individual commitment to institutional transformation that advances equity, inclusion, and social justice for diverse women in STEM?
2. How do implementation of and repeated exposures to OSU ADVANCE contribute to transforming OSU's symbolic and institutional contexts—policies, experience climate and communicated culture, and systemic practices—to be equitable, inclusive and social just for diverse women in STEM?

Key impacts identified from the internal evaluation report are summarized below:

Community Readiness

Analyses conducted by the internal evaluator addressed community readiness to take action pertaining to issues of equity, inclusion and justice (EIJ), particularly for women in STEM along several dimensions. A 9-stage, criterion-anchored community readiness scale was adapted for the OSU ADVANCE work, ranging from “1” No awareness (the issue of EIJ in STEM is not generally recognized by the community or leaders as a problem) to “9” (Community Ownership/Professionalism: highly detailed and sophisticated knowledge exists about EIJ for women in STEM, including prevalence, causes, and consequences; effective evaluation and data justify sustainability and guide new directions).

Based on analyses of several sources of data (i.e., artifacts, interviews), the internal evaluator documented that the levels of community readiness increased along all dimensions (community knowledge of efforts, current institutional efforts, institutional climate, knowledge of issue, leadership and current resources related to issue). The overall stage of community readiness for EIJ institutional transformation increased from the baseline year 1 to the midpoint at Year 3. According to the 9-stage community readiness scale, at baseline, the overall stage of community readiness was a “5,” indicative of the *Pre-preparation stage* in which active leaders begin planning in earnest and the community offers modest support for their efforts. By grant Year 3, the overall stage of community readiness was a “7,” representing the *Stabilization stage* in which activities are supported by administrators or community decision-makers and staff are trained and experienced.

Activities to Catalyze Change

Analyses of the impact of the main grant activities (ADVANCE Seminar, Sponsored Events, Roadshows, and Influencer Dialogues) conducted by the internal evaluator reveal that at the grant's midpoint, the ADVANCE Seminar was the most effective program activity for catalyzing change at the institutional, symbolic, and individual levels (as hypothesized in the theoretical framework) and that the strength of change is influenced by the intensity, frequency, and number of people who were exposed to the grant activities, of which the ADVANCE Seminar was the most impactful. Colleges with higher and earlier participation in the ADVANCE Seminar showed greater impacts at the grant midpoint.

After the ADVANCE Seminar, the next most influential activities as of the grant's midpoint were: Influencer Dialogues, Roadshows, and Sponsored events (in that order).

A content analysis of action plans conducted by the internal evaluator reveal that participants were proposing actions to address the individual, symbolic, and institutional levels and that the action plans addressed the following action themes: promotion and tenure, climate and culture, recruitment and retention, mentoring, and diffusing and disseminating equity, inclusion, and justice.

Yet analyses conducted by the internal evaluator reveal that the thematic area of promotion and tenure was in need of additional focus because there were gaps in shared knowledge and value among members and across P&T committee members. One concern was the lack of awareness and understanding of the required equity, inclusion, and justice efforts in position descriptions and how efforts to standardize equity, inclusion, and justice efforts may contribute to inequitable promotion and tenure decisions. A second thematic area of concern was climate and culture. The internal evaluation analyses revealed that the intersection of academic and workplace hierarchical cultures was a barrier to equity, inclusion, and justice work. Many of the people at the institution doing equity, inclusion, and justice work have little instrumental support, protection, and/or power to change the system.

Institutional Climate

Findings from the 2014 and 2016 institutional climate survey were summarized as part of the internal evaluator's midterm report. Analyses indicate that the strongest positive changes in institutional climate between 2014 and 2016 occurred at the institutional level, including seeing leadership visibly foster diversity, feeling the university values personal involvement in diversity initiatives on campus, and being involved in diversity initiatives and/or shaping policies at the institutional and/or unit/department level. Some aspects of climate declined between 2014 and 2016, especially related to declining satisfaction with performance evaluations (having performance evaluations that provide useful information on actual performance and having performance evaluations relevant to career advancement), having the ability to speak freely about personal concerns to colleagues, and personally recommending OSU as an employer.

5.3 Summary of Findings from Interviews Conducted by External Evaluator

In interviews conducted by the external evaluator, several themes emerged to describe the impact of ADVANCE at OSU. Each of these themes is summarized below.

5.3.1 The ADVANCE Seminar raised awareness

In interviews, stakeholders emphasized that OSU ADVANCE, and the ADVANCE Seminar in particular (which stakeholders often referred to as "ADVANCE") had helped raise awareness of equity, inclusion, and justice. Moreover, participants are internalizing the awareness they gained.

“I have administrators come to me to tell me how impactful the seminar was. For example, just recently, one of the administrators who made a hiring decision said, ‘My awareness having participated in the ADVANCE program has been so opened up to these issues and concerns. And I really wanted to share with you some of my thoughts and decision-making around this particular hire.’ It has changed the way that we approach our work.”

“I’ve had people who participated in the ADVANCE program tell me that it really had a transformational effect on them. It woke them up to blind spots and to areas of indifference that were totally inappropriate, and they’re trying to be better people as a result. I’ve had similar eye-opening experiences and I would always have considered myself to be a very inclusive and diversity-minded person. But we all have blind spots that we didn’t realize were there.”

“The training really opened my eyes even though I was assuming that I was very comfortable with diversity. It opened my awareness to some of the blind sides I have myself.”

“For the first time on this campus, faculty leaders in science and leaders in administration had an opportunity to learn about the systems of oppression, to learn about privilege, to be faced with their own privilege. That alone is huge. It’s something that we expected of our students, but we don’t expect it of our faculty. Many of them I think really liked it, others it was too uncomfortable for them. But even for those individuals, in many cases I still see that they’re moving forward. I think that that is absolutely critical.”

“I gained a much greater depth of knowledge of the issues and the viewpoints of people from underrepresented groups, people who have less power. People who have been historically disadvantaged in academia and society in general. I think I gained a deeper understanding of many of these different areas. In some areas I knew I had some knowledge. In other areas I had very little, and so there were some areas where I gained more knowledge than in others. For example, I knew very little about the viewpoints of transgender and homosexual individuals or people who are not cisgendered. Other areas that I feel like I knew more to begin with, such as the challenges that women face in particular.”

“The program had a big impact on me, and I know it had a big impact on others. I don’t know how I would have achieved that by any other means. Although, you know, I wasn’t out let’s say actively looking for an experience like that, but after having it, it was quite an impact.”

“Well I view equity, inclusivity, and justice as foundational to the university’s mission. I’m drawn to learn more about the issue. There are a lot of things I don’t know still. Obviously, even a two-week program is still scratching the surface of many of these topics. It was an opportunity for personal and professional growth for me as it relates to equity, inclusivity, and justice on a university campus. I’m

committed to making this a more equitable and tolerant place. So, I wanted to get trained to be able to help with that work.”

5.3.2 Increased awareness gained at the ADVANCE Seminar inspired action

Many stakeholders noted that not only had the seminar raised their awareness, but that they had acted on that new awareness, as these stakeholders explained:

“I was always interested in how you get the community to respond in a meaningful way to the challenges that are out there for those from underrepresented groups. I really felt that the ADVANCE program has been tremendously helpful. It really is very eye opening, I don't care what your background is. I don't care how much you think you get it and you know what the issues are. I think it's a really good learning experience for anyone who goes through it. And I've had a lot of people tell me that they were undertaking initiatives in their college, in their department, in their area of administrative activity, and it really was motivated by the insights that they got out of going through the program.”

“I'm certainly more aware of my own unconscious biases. The seminar gave me enough courage and training to look at myself and my actions and think about it, but then also, as I move into other roles, push a little bit on the system to say to faculty or administrators, ‘What about this?’ And sometimes I get pushback, especially from faculty, but then it kind of settles in and they think it might be a good idea.”

“Because of what I learned at the seminar, I changed the process for search committees. Things from search advocate training, having a search advocate, looking at the demographics of the pool before departments can make their short lists, and making sure that all of the processes are followed when making the short list. As a result, we have increased the number of minority faculty we hired as well as the number of women faculty. This all arose from my own action plan.”

“I have held various positions within OSU since I attended the seminar. And I have brought the best practices I learned to each new position and role.”

“It was a transformational experience for me and transformational for the college. We have tackled the search process. Our next goal is tackling the promotion and tenure process.”

5.3.3 Action plans inspired movement to support change

While many stakeholders were inspired to act upon the knowledge they gleaned at the ADVANCE Seminar, they affirmed that the action plans were essential for inspiring them to act and served as a commitment to act. For example:

“The immersion and the awareness coupled with the action plans and follow-up has resulted in changes. The changes are occurring at different speeds across colleges for different reasons. Some because of how many people have been through the seminar. Some because of personality and personal engagement. Others I think just fortuitous because who happens to be in administrative roles and their ability to really promote change and get things to happen.”

“Without the seminar and the resulting action plans, there is no reason for people to act in connection to social justice. They might, but the action plans motivate people to instigate actions that fit within their own goals. And they are doing it with this broader understanding of what equity and inclusion are all about. It’s in concert with the university goals of equity, justice and inclusion, which makes it more powerful because they are interconnected conceptually.”

“The seminar really altered their perspective and awareness, and it increased their commitment to diversity, equity and inclusion. And it increased the commitment to act, and consequently an elevation of that area as a priority for whatever division the leader is in charge of, and also passing that on to the executive team, the leadership team of that executive. The experience basically altered a perspective and increased the motivation in taking some kind of action aimed at improving our situation.”

“My action plan addressed disrupting how we hire faculty, which was hard to implement but we did it successfully and our numbers are showing it. We required that a Search Advocate from outside the hiring unit be on every faculty search and that the Search Chair be trained as a Search Advocate. Then we focused on implementing best practices into the search process, developing the rubric for evaluating candidates before anyone applies and working on the advertisement and position description as a committee. Providing oversight by the Associate Dean for Faculty Advancement, which is a new position. This person will review the phone interview list, demographics of the applicant pool and compare it to the demographics of the selected candidates. We ask for a statement about their commitment to equity and inclusion along with their teaching statement and research statement. About five years ago, our college was tied with 11 other land grant universities as 15th in terms of the number or the percentage of women faculty in engineering. I think now we’re number two in the country among the land grants....The seminar was a transformational experience for me. Without the seminar we wouldn’t have made all these changes.”

5.3.4 Attendance by university leadership is essential for change

Stakeholders affirmed the importance of having university leadership attend the ADVANCE Seminar, noting that administrators have the power to make changes and to encourage others to act to support equitable, inclusive, and just practices. The validation of leadership also gives permission for others to speak up and act accordingly. The attendance and

support of upper administration is essential for institutional transformation, as these interviewees explained:

“One of the reasons we have been so successful is that several of our senior faculty and administrators had gone through the training. It allowed things to happen organically and for things to catalyze and accelerate.”

“I’ve long been a champion for many of the things that ADVANCE is seeking to advance. I found some really good pieces of material in the seminar. But maybe the most useful was being able to observe some of my peers and realize how new some of these conversation topics and concepts were to some of them. Not in a bad way, it was just really clear that some of these things had not been thought through by others. And if you’re trying to push an entire institution forward, that makes it more complicated. That’s why it’s so valuable to have as many people participate as possible, especially those in leadership positions.”

“We’ve had most of our college leadership participate in ADVANCE. It’s resulted in the biggest changes because it’s a connection and building block for moving forward on these issues.”

“The power of having a senior leader go through the program is that they can direct people to act. And there is an empowerment process, where the leader can form a task force and create a bottom-up process that would lead to greater engagement and also a cultural shift.”

“There’s been some monumental changes, particularly among senior male white administrators in terms of their perspectives on some of the issues that they’ve been exposed to like gender inequality, people of color issues, the ways in which the institution itself creates institutional barriers. It’s stimulated some of those male senior administrators to do some pretty phenomenal things. They have brought in speakers, changed how they do hiring, changed policies, rewriting tenure and promotion procedures. They did things that are intentional around changing the very nature in which they’ve operated for the last 50 years. And that came as the result of these men sitting in a room with lots of different people and listening, participating in, and basically having their world sort of changed.”

“One of the reasons why my action plan was so successful was that I had the full support of my dean.”

5.3.5 Shared language facilitates change

Attendance at the seminar and embracing of the content by upper administration has also resulted in a shared language that participants noted was especially important for changing the climate. The common vocabulary regarding systems of oppression, equity, inclusion, justice, and diversity, coupled with visible administrative support, provided a vehicle for legitimizing conversations and actions to support institutional transformation. The result

was a change in culture regarding the frequency and acceptability of discussing the importance of equity, inclusion, and justice and taking actions to improve equity, inclusion and justice:

“Well the deans are a part of the senior leadership team for the university, and we meet a couple of times a month. Topics around equity, inclusivity, and justice are specifically a part of the agenda. But even when they're not these topics often come up. I think enough of the leadership team have taken the training that it's part of the culture.”

“From what I've been hearing, people are very comfortable with the idea that they would report an incident of bias. I think that's because within our college, we've had a large number of leaders go through the program and then we've been pushing that our diversity and inclusion strategic plan is a key part of the college.”

“ADVANCE helped legitimize some priorities and actions. The conversations were always there, but now they are legitimate. People now know that if they speak up about an issue, others will understand because they have the same language and terminology.”

“President Ray, who went through the seminar, now has all this ammunition. He is now surround by virtually his full administration, dean administration, many of whom are white males, who have gone to the ADVANCE training. So when he says something now, or gives an initiative, they all get it. And they act because they realize he is serious and wants these changes made ASAP. Because they've been through the training, they understand.”

“The tenure and promotion process has changed. The hiring process has changed. The ways in which people look at issues that are going on in their own units, in terms of department meetings, has changed. People naming micro-aggression has changed. People naming institutional discrimination, systemic discrimination. This is all a language people now have, in my opinion, especially senior administrators, because of the ADVANCE Program.”

5.3.6 Systems of accountability are essential

Several administrators pointed to the importance of systems of accountability for achieving the desired impacts and of continued vigilance, for example:

“I am willing to fail searches or extent them until the applicant pool better reflects the national pool. If searches don't follow proper procedures, they won't be allowed to continue. This was hard at first, but people adapted and now accept it. Not only do they accept it, but they realize its importance.”

“In this particular change [to the search process], it was really brute force and many searches failed. But that type of disruption got everybody's attention. But then, how

do we keep it going? One important aspect was to hire an Associate Dean for Faculty Advancement, which helped immeasurably because it's their job. The associate dean meets with every search chair, sometimes with the committee and the associate dean is in contact with the search advocate. This has changed the culture."

"It's helpful to have someone following up about the action plans. Otherwise, it's relying on the honor system. People have good intentions, but it's easy to let things slide even though they are a priority. Having that accountability is important."

"We need mechanisms to keep the dominant culture to stay focused, to stay on course, to address the inequities that people who are from underrepresented groups face every day. We can't just do this once and be done. It's something that has to be attended to continually."

"We can't depend on the people who have already been trained. People leave. And people are ready for action but need policies and practices to support their work. We need accountability measures and to make sure that we reward work to improve diversity, equity and inclusion. Otherwise, the work continues to be less visible and under-rewarded."

5.3.7 Sharing of collective knowledge and best practices facilitates change

Participants also noted that the collective knowledge and best practices were being shared across units and that they were using each other as resources, for example:

"Someone in my cohort helped develop the first diversity committee and did some brainstorming about how to incorporate it in position descriptions. We didn't have anything in our department like that and were facing some resistance from the faculty a bit. So, we reached out and she came in to talk about their program—what the benefits are and how it was received. We were able to reapply what was going on without having to reinvent the wheel."

"I worked with the other deans in my cohort. We developed the action plan together to address the search process. There were a few college-specific things, but we all agreed to make changes and implement them in our colleges. We talked about things that work and things that don't work also."

"I've used policies from other units, for example, how I direct searches to be conducted in my college. These were policies developed in another college by the dean who took the ADVANCE training. I learned about them from him. And another dean has made real efforts to have excellent representation of women in leadership in his college. That's something that I would like to improve. I look to him and to his college as a leader in this area."

5.3.8 ADVANCE Seminar facilitated women's leadership development

An unintended outcome of the ADVANCE Seminar was that it provided some faculty with new opportunities for professional development. Some stakeholders mentioned that being able to working with those in leadership positions and having upper administration get to know them helped provide new opportunities for leadership roles:

“Participating in ADVANCE helped my career in that it gave me access to leadership on campus and getting to know some of the leadership on campus, and them getting to know me. Otherwise, I'm not sure I would've been tapped on the shoulder and asked to take on some of the leadership roles I have had. And in those roles, that ADVANCE training helped me work with faculty and attend to issues of diversity and inclusion.”

“Being able to meet with other administrators was very valuable, in addition to the value of the seminar itself. It strengthened my network in the university and has helped me in many facets of my job.”

“The Faculty Fellows program has helped develop women's leadership experience, giving them the opportunity to train for these positions. While I don't think this was an intended effect, it is a very positive one that also supports ADVANCE's mission.”

To conclude, data from interviews conducted by the external evaluator suggest OSU ADVANCE is serving as a catalyst for advancing equity, inclusion, and justice. While most stakeholders commented on the impact of the ADVANCE Seminar, targeted communications such as the Influencer Dialogues and Road Shows undoubtedly also contributed to the impact, as many mentioned the understanding of and support for ADVANCE goals by leadership was essential.

Key drivers of the changes in culture and practices are that attendance at the ADVANCE Seminar is building a critical mass of people who share a common language and desire to affect change. The common vocabulary provides the mechanism for people to take action and to “speak up” on a wide scale in ways that their colleagues cannot only understand but can embrace. The widespread attendance at the ADVANCE Seminar by the university leadership is essential for providing institutional legitimacy and action. Attention to action plans provides additional motivation to act and the Faculty Fellows are helping to support accountability for the action plans. Systems of accountability must be put in place to ensure efforts remain focused and to support long-term change and continued vigilance.

5.4 Other Key Findings

5.4.1 Transitions in Upper Administration

A new Provost has been at OSU for just over a year and attended the ADVANCE Seminar at the end of summer 2017, shortly after his arrival. The OSU ADVANCE team has been meeting with him and he chairs the Internal Advisory Council.

In interviews, several stakeholders noted concerns about the recent transitions in upper administration, particularly the departure of so many women vice provosts (5 of the 7 women occupying vice provost positions left OSU within the past 6 months). While stakeholders said these women administrators left for good positions, those interviewed thought their departure was not only because of the “pull” of new opportunities at other institutions but also a reaction to a “culture shift” at the university, for example:

“Turnover is normal, but it’s more than average in terms of numbers and in terms of gender and race or ethnicity of those leaving. These women all went to great jobs and that’s wonderful, but why are so many of them looking right now?”

“Why are all of the women administrators leaving? How will the university prioritize DEI efforts in times of reduced resources? I hope the departure of so many women administrators will be a sign that it’s important to ensure that OSU remains a diverse, equitable and inclusive institution and that we need to continue to be vigilant about these issues.”

“There is a lack of commitment to sustainability at this point.”

“I see the culture shifting here toward a more traditional view of women. I’m not sure there is as much openness and understanding about what women bring to leadership, especially women who have children.”

Given the importance of the training of upper leadership for the process of institutional change (section 5.3), those interviewed noted that it is especially important to ensure that the ADVANCE Seminar be sustained to support new incoming leaders and ensure that institutional progress initiated under the grant term is sustained, as these interviewees explained:

“With so much turnover in administration, we need to make sure that the new people are able to participate in the seminar to ensure that the momentum is not lost. Having upper administrators conversant in these topics is essential.”

“The turnover in administration is a reminder that we can’t just train leaders once and then be done. The need will always be there.”

5.4.2 Communication of Internal Evaluation Framework

Stakeholders report that the theoretical framing of the internal evaluation is complicated and difficult for campus stakeholders to communicate. The robust internal evaluation design involves time-intensive data collection, coding, and analyses.

Following the NSF third year site visit, the program officer asked the OSU ADVANCE team to respond to several issues regarding the internal evaluation, including:

- recommending additional resources be allocated to internal evaluation efforts;
- enhancing coordination and communication of the PI leadership team/research team with the internal evaluator; and
- simplifying the evaluation and logic model (which will help ensure that formative evaluation is available for assessing the effectiveness of strategies and the development of sustainability plans).

In response to this recommendation, an additional .15 FTE of effort was added to support the internal evaluation. Yet the complexity of the theoretical framing of the internal evaluation efforts have reduced the impact of the internal evaluation efforts because the model is not well understood by many campus stakeholders and because of the long timeline for which institutional change is expected to occur. Moreover, the internal evaluation efforts, research efforts, and leadership team have sometimes found communication and coordination challenging.

5.4.3 Internal Advisory Council

The IAC has been meeting and is comprised of three subgroups to address sustainability, the ADVANCE journal, and ADVANCE Faculty Fellows. The majority of the IAC is focused on sustainability and worked with the OSU ADVANCE leadership team to draft the sustainability proposal (section 5.4.4). The IAC is comprised of key stakeholders including institutional partners and faculty. Deans are missing from the IAC, however. To support sustainability, deans should be added.

5.4.4 Progress toward Sustainability

In Year 4, the OSU ADVANCE leadership team has actively engaged in discussions of sustainability with OSU administrative leadership. OSU ADVANCE worked with the sustainability subcommittee of the IAC to draft a sustainability proposal, which was forward to Provost Feser in Spring 2018. The proposal provided the rationale and associated annual costs for sustaining the ADVANCE Seminar, Faculty Fellows Program, ADVANCE Journal, and personnel to support efforts (an ADVANCE PI/Director, Program manager, and graduate student to assist with program evaluation). Conversations with Provost Feser about the sustainability proposal will take place in Fall 2018.

Central to discussions of sustainability is whether the ADVANCE Seminar can be sustained in its current form or whether it can or should be offered in a shorter and/or more spread-out format. Many favor retaining the intensive two-week experience. Proponents note that the

research on the impacts of the seminar are grounded in its current format and hence it is unknown whether the same impacts could be achieved with other formats. Some proponents of retaining the current format also feel that the intensive two-week format is essential for providing a safe space and an intensive experience necessary to achieve the desired impacts. In contrast, those advocating for changing the format to either shorten the duration of the seminar (for example a one-week seminar) or to spread out the sessions over time note that doing so may make it more accessible, particularly to upper administrators, who were especially likely to report that the intensive two-week format made it very challenging to attend given they needed to keep up with their administrative responsibilities while attending the seminar. Some participants also felt that the content could be delivered as effectively in a shorter time period. The lack of consensus about the ideal format among key stakeholders who are contributing to sustainability discussions is an additional source of uncertainty as sustainability decisions are being made.

To help support sustainability and also disseminate the ADVANCE Seminar, the OSU ADVANCE team is planning to provide a Train the Trainer program in Spring of 2019. At this time, the program will be available to ADVANCE Seminar graduates (and graduates of the original 60-hour Difference Power, and Discrimination Seminar offered at OSU upon which the ADVANCE Seminar was adapted) and to faculty and administrators from other institutions. Attendance by those from other institutions will support the dissemination of the model beyond OSU. Attendance by OSU faculty and administrators is intended to build capacity to continue the ADVANCE Seminar at OSU beyond the grant period. Should OSU decide not to sustain the ADVANCE Seminar, however, the Train the Trainer program will be geared toward non-OSU participants.

6. SUMMARY OF YEAR 4 PROGRESS TOWARD PROGRAM OBJECTIVES

6.1 Objective #1: Recruitment and Promotion

Objective 1 is to influence academic recruitment and promotion policies and practices to assure equitable, inclusive, and just advancement.

The activities undertaken to date that should have the most direct, significant impact on this goal are the ADVANCE Seminar (including the action plans) and the work of the Faculty Fellows Program. Findings from interviews with the external evaluator indicate the ADVANCE Seminar has been especially impactful in catalyzing changes in the recruitment process in terms of search committee practices and accountability by deans for ensuring the process was equitable, inclusive, and just. Administrators were motivated to utilize available resources, such as Search Advocates, to support their goals. Interviews reveal a growing attention to promotion processes as well but this area is still developing. Likewise, analyses conducted by the internal evaluator reveal that the thematic area of promotion and tenure was in need of additional focus because there were gaps in shared knowledge and value among members and across P&T committee members.

The “Toolkit” indicator data (Section 5.1) reveals large gains in women’s representation among new hires over the grant period. The average percent of women hired in STEM and SBS fields increased in Years 2-4 over the baseline at each rank, with the exception of full professors in SBS where no hiring took place during this period. In STEM, women’s representation among those hired as assistant professors increased from an average of 29% in the baseline to an average of 46% in grant Years 2-4. During that same time period, the percentage of STEM women hired increased from 48% to 81% for associate professors and increased from 24% to 62% for full professors. In SBS, the percentage of women hired as assistant professors increased from 48% to 81% during this same time period and all three hires made at the associate professor level during grant Years 2-4 were women.

The number of women tenured and promoted in STEM fields remained fairly stable since the baseline (Figures 8-9), but the percentage of those promoted from associate to full professor who were women decreased from 40% in Year 2 to 13% in Year 4. These results should be interpreted cautiously, however, given the small numbers and the lack of context regarding which faculty are eligible to be promoted. In SBS, women’s representation among those tenured and promoted from assistant to associate professor increased in Years 2-4 combined in comparison to the baseline, but decreased among those promoted to full professor. Again, sample sizes again warrant that these data be interpreted cautiously.

To conclude, very impressive gains in hiring have occurred during the grant period. These gains are consistent with reported efforts by administrators (guided by their increased awareness gained from the ADVANCE Seminar and corresponding action plans) to focus on practices and procedures that support an equitable, just, and inclusive search process. Many are seeking to take these best practices and new knowledge and extend them to the tenure and promotion process.

6.2 Objective #2: Institutional Climate

Objective 2 is to contribute to an institutional climate that reflects a shared value for equity, inclusion, and justice.

Analyses conducted by the internal evaluator reveal that by the mid point of the grant, the community readiness to take action pertaining to issues of equity, inclusion and justice, particular for women in STEM has indeed increased over the baseline period. Moreover, readiness increased along all dimensions of institutional transformation, suggesting changes are multifaceted and mutually-supportive.

Interviews conducted by the external evaluator emphasize that the university leadership has helped to embed values of equity, inclusion, and justice in their practices which supports institutional climate change as well. The importance of university leadership in contributing to institutional climate that reflects values of equity, inclusion, and justice was also evident from the climate survey data. Analyses of climate survey data conducted by the internal evaluator suggest that the strongest climate changes are at the institutional level, especially seeing leadership visibly foster diversity. The positive changes in institutional climate supported by having leadership visibly foster diversity, feeling the institution values

involvement in diversity efforts, and being involved in diversity efforts are directly aligned with the work of OSU ADVANCE.

While institutional climate is changing to support ADVANCE goals, the recent loss of many female administrators has been a source of concern and uncertainty for stakeholders. Providing opportunities for women to develop their leadership skills and supporting a climate that values equity will help support the movement of new women into these leadership positions. The recent turnover in leadership also reinforces the need for continuation of the ADVANCE Seminar. Stakeholders have noted that the seminar has been essential to institutional change *because* a substantial number of OSU's administrators have completed it. Some degree of administrative turnover will always be present and being able to bring new leaders on board and make them facile in the language and actions of equity, inclusion and justice will be a continuing need.

6.3 Objective #3: Awareness and Actions

Objective 3 is to provoke faculty and administrators' personal awareness of difference, power, and discrimination in the academy and actions that contribute to equitable, inclusive, and just treatment.

The ADVANCE Seminar is most directly aligned with Objective 3. Data indicate the ADVANCE Seminar is effectively increasing participants' awareness of difference, power, and discrimination and that the action plans provide the vehicle for them to translate their awareness into actions. Analyses conducted by the internal evaluator reveal the action plans are addressing the individual, symbolic, and institutional levels of change and that the plans addressed the following areas: promotion and tenure, climate and culture, recruitment and retention, mentoring, and diffusing and disseminating equity, inclusion, and justice.

Interviews conducted by the external evaluator indicate the ADVANCE Seminar is not only raising participants' awareness of equity, inclusion, and justice but inspiring them to act accordingly. They are sharing best practices and disseminating their practices both within and across units. Those interviewed affirmed the importance of having the university's leadership attend the seminar because they are able to make changes in policies and practices, can direct others to act, and because their support provides legitimacy of these goals and of the work of others to advance these goals. The seminar also provides a common vocabulary that supports conversations and actions; the shared vocabulary is especially effective in catalyzing movement toward these goals because so many members of the campus community have participated in the seminar.

7. CONCLUSION AND RECOMMENDATIONS

At the end of Year 4, OSU ADVANCE has made meaningful progress toward its objectives. Stakeholders point to the ADVANCE Seminar as a catalyst for institutional change supporting just, equitable, and inclusive practices and outcomes for faculty, women faculty in particular. The seminar has reportedly raised awareness, encouraged administrators and faculty to act based on that new awareness, and resulted in the sharing and dissemination of best practices within and across units. Stakeholders pointed to the importance of having the university's leadership attend the seminar because they have the ability to make changes, can direct other to act, and because their support provides legitimacy for efforts. The large numbers of faculty and administrators who have attended the seminar has also resulted in a common vocabulary that supports conversation and action to increase diversity, equity, and inclusion at OSU.

Over the grant period, there have been impressive gains in the percentage of new hires who are women. The average percent of women hired in STEM and SBS increased in Years 2-4 over the baseline for each rank where hires were made. In STEM women's representation among those hired as assistant professors increased from 29% at baseline to an average of 46% in grant Years 2-4. During that same period, the percentage of women STEM associate professors hired increased from 48% to 81% and women full professors from 24% to 62%. In SBS, the percentage of women assistant professors hired increased from 48% to 81% during this same time period and all three associate professors hired during this period were women. (No SBS full professors were hired in grant Years 2-4.)

Although some resources that support inclusive hiring outcomes, such as the Search Advocates, were in place before OSU ADVANCE, the ADVANCE Seminar helped participants leverage these resources to be even more impactful. Interview findings reveal that much of the work of the seminar participants through their action plans focused on recruitment—specifically putting practices and procedures in place to support a just, equitable, and inclusive process. Systems of accountability (for example, Search Advocates and deans' willingness to extend or fail searches) strengthened impacts.

The empirical study of the effects of the ADVANCE Seminar, being undertaken by the social science component of the grant, is essential not only for demonstrating the impacts of the seminar (which preliminary analyses suggest are present), but also for disseminating the impact to other institutions as a possible mechanism for supporting institutional transformation.

Summary of Key Accomplishments:

- Building cohorts of administrative leaders and faculty who share a common language and goal to advance equity, inclusion, and justice at OSU
- Successful efforts and best practices are being coordinated and disseminated within and across units
- Increases in women's representation among new hires in STEM and SBS
- ADVANCE Seminar is catalyzing action that supports equitable, just, and inclusive practices
- Launching the ADVANCE Journal

Summary of Key Challenges:

- Transitions in upper administration
- The complexity of the theoretical framing of the internal evaluation efforts have reduced the impact of those efforts because the model is not well understood by many campus stakeholders
- Challenges in communication and coordination of the internal evaluation efforts, research efforts, and leadership team
- Lack of consensus about the length of ADVANCE Seminar for sustainability purposes

Key Recommendations:

The following recommendations are intended to build on accomplishments to date, increase the impact of activities, and support the institutionalization and sustainability of successful grant initiatives:

Evaluation:

- Work with the internal and external evaluators to:
 - Identify priorities for evaluation based on findings from the internal and external evaluator
 - Discuss the summative evaluation and ensure all necessary data is being collected, including a timeline for collection and analysis
 - Focus efforts in Year 5 to summarize impacts to date, including the areas of recruitment and promotion, documenting how practices and policies have changed in alignment with OSU ADVANCE initiatives
- Hiring has been an area of significant impact; seek data on the composition of applicant pools and finalists for faculty positions for analysis

Climate:

- Provide opportunities for women faculty to develop their leadership skills and assume leadership positions
- Focus efforts on ensuring the promotion and tenure processes support just, inclusive, and equitable practices

Sustainability:

- Add deans to the IAC; their engagement is essential for sustainability
- Embed systems of accountability within the action plans and work of the Faculty Fellows
- Continue to support mechanisms to share best practices across units and institution-wide
- Proceed with plans to work with Provost Feser to vet a sustainability plan that will provide sufficient funding and mechanisms to continue the key initiatives (ADVANCE Seminar, Faculty Fellows, ADVANCE Journal) and personnel

Dissemination beyond OSU:

- As research findings become available, disseminate through publications and presentations to maximize the grant's broader impacts and intellectual merit
- Consider adjusting workload to support the social science research, as the dissemination of findings is a priority as the grant nears completion
- Proceed with plans to offer Train the Trainer workshops to faculty and administrators from other institutions

In conclusion, OSU ADVANCE has made impressive progress in the areas of recruitment and actions to support inclusive, just, and equitable practices and outcomes for women faculty. As the grant moves in to the final year of funding, attention to sustainability of the ADVANCE Seminar and ADVANCE Journal, and dissemination of findings and best practices through publications and the Train the Trainer Workshop are essential for achieving the grant's intellectual merit and broader impacts.