

Policy and Program Review Report

by MSU ADVANCE Team

Project: Differences and Deficits Affecting Women STEM
Faculty: Creating a Framework for Change at a Rural
Public University

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Summary

Institutional policies and programs could either facilitate or create barriers for the recruitment and retention of female faculty in the sciences. It is one of the planned activities for the MSU ADVANCE team to conduct a policy and program review, as part of the objective to identify the pattern of representation of women in STEM. We reviewed a selected set of work-life policies based on an ADVANCE Implementation Mentors (AIM) Network study, plus the mentoring and networking program, another focus of the MSU ADVANCE project. Data was collected from the AIM Network matrix for 23 ADVANCE IT institutions, and the official web sites of Murray State and 32 comparable institutions. The results show that most ADVANCE IT institutions have spousal hiring policy, parental leave policy, child care and elder care assistance, while most comparable institutions do not have a formal policy in these areas. The data also reveals that tenure clock extension policy is common in both ADVANCE IT institutions and institutions similar to Murray State; two-year or one-year extension is popular. In addition, the majority of ADVANCE IT and comparable institutions offer on-campus child care, and very few comparable institutions have formal mentoring and networking programs.

1. Introduction

Many factors related to the underrepresentation of women in STEM disciplines can be conceptualized as falling into two primary categories: deficit and difference factors (Sonnert & Holton, 1996). Deficit factors are structural obstacles and mechanisms in the workplace that lead to both formal and informal exclusion of female faculty. Difference factors are characteristics internal to the individual that lead to gender disparities, including differences in men's and women's goals, outlook, and behavior. We hypothesize that deficit and difference factors manifest differently at a rural public institution. One of the objectives of the project is to identify the pattern of representation of women in the science disciplines. For our project, the sciences include both STEM (science, technology, engineering, and mathematics) and SBES (social, behavioral, and economic sciences) disciplines. In order to understand how the formal organizational structure of MSU may serve as an obstacle or an asset in the recruitment and retention of women in the sciences, we have collected and conducted a review of the university policies and programs that may have a particular impact on female faculty. This report contains the methodology we applied for the review and the findings. A summary of the review results was presented to the MSU ADVANCE Internal Advisory Board during the meeting on November 15, 2016.

2. Methods

2.1 The selection of policies and programs for review

The list of university policies and programs that potentially impact the recruitment and retention of female faculty in the sciences can be very long and intimidating for any review

attempt. After discussing with several ADVANCE project leaders from other institutions, we discovered that the ADVANCE Implementation Mentors Network (AIM Network) had developed a matrix to track relevant policy implementation at ADVANCE institutions of Cohorts 1 and 2 (AIM Network, 2011), the earliest two groups of recipients of NSF ADVANCE IT (Institutional Transformation) grants. See Appendix I for a list of ADVANCE institutions included in the AIM Network matrix. The matrix focused on institutional policies related to work-life satisfaction, including: 1) dual career assistance, 2) expansion of tenure clock, 3) part-time tenure faculty, 4) job sharing, 5) transitional support program, 6) paid parental leave, 7) unpaid parental leave, 8) on campus child care, 9) financial assistance for child care, 10) elder care programs or assistance, and 11) other. This emphasis on work-life policy is well supported by the literature. Women are more likely than men to prioritize family responsibilities above career choices, including giving up or changing research areas or jobs in order to meet the demands associated with home life or parenting (Heilbrunner, 2013; Wyss & Tai, 2010; Xu, 2008). Female scientists are much more likely than male scientists to have a spouse who is also a scientist (83% vs. 54% according to Schiebinger, Henderson, & Gilmartin, 2008). With or without children, the career needs of professional couples can pose a challenge for female scientists, especially at rural institutions.

Women scientists working in regional institutions, especially those in rural locations like MSU, may find additional challenges when it comes to networking and building social capital. Having a wide network provides a person with a large pool of resources to draw on and facilitates the freedom to explore occupational options and alternatives (Granovetter, 1983) and creates opportunities for better information gathering and leverage, which in turn

increases the likelihood of being promoted and gaining advantages within the organization (Barrick & Zimmerman, 2009). Female scientists, however, experience more difficulties than men in initiating collegial contacts and are less likely to forge the kinds of social bonds with colleagues that can be important to their research programs and career (Sonnert & Holton, 1996). They also report more exclusion from informal networks than their male colleagues (Thomas et al., 2015). As a result, women may find it difficult both to build their contacts, and develop networks that can lead to structural opportunities for advancement. Effective mentorship is also directly linked to women's persistence in STEM areas (Dawson, Bernstein, & Bekki, 2015). Women in general encounter more difficulties than male scientists in finding senior level mentors (Thomas et al., 2015) and these deficits are exacerbated at rural institutions.

Considering the available information in the AIM Network matrix, the relevance of the policies in the institutional context of Murray State, and the objectives of our ADVANCE project, we selected the following policies and programs for this review: 1) dual career accommodation, 2) expansion of tenure clock, 3) paid parental leave, 4) unpaid parental leave, 5) on-campus child care, 6) financial assistance for child care, and 7) mentoring and networking.

2.2 Institutions reviewed for policy

In addition to Murray State and the ADVANCE institutions included in the AIM Network matrix (mostly Research Universities), we obtained a list of 32 institutions (Appendix II) from Renee Fister, Senior Presidential Advisor for Strategic Initiatives. These institutions were

identified as our Benchmarks or similar to us in some component(s), thus comparable to Murray State in some way.

2.3 Data source and collection

Policy and program information came from published policy documents online and web pages. For Murray State University, the documents included the *Faculty Handbook*, the *Board of Regents Policy Manual*, and *MSU Personnel Policies and Procedures Manual* maintained by Human Resources (HR). Specific language or lack thereof in these documents was recorded in a spreadsheet. The equivalent or comparable documents of the aforementioned three manuals were searched for on the official websites of the 32 comparable institutions. The search included both a general research by key words on each specific institution's website, and specific content review on the websites of HR, the Provost's Office, the President's Office, and Faculty Senate, if the general search produced no result. The information was then recorded in the spreadsheet. The information was up-to-date as of August 2016.

In addition to gathering the data from each institution and assembling them in the spreadsheet, the StratEGIC (Strategies for Effecting Gender Equity and Institutional Change) Toolkit served as a reference for strategic interventions implemented by ADVANCE IT projects (Lauren & Austin, 2014)), a collaborative effort by researchers from Michigan State University and University of Colorado Boulder.

3. Results

3.1 Work-life policies at the ADVANCE institutions

There were a total of 23 ADVANCE institutions in the AIM Network policy matrix. Among them, 10 institutions have established formal policy or practice for dual career assistance, an additional 10 institutions have informal practice. Ten (43%) or more institutions have formal policy or practice in the areas of part-time tenure faculty, transition support program, financial assistance for child care, and elder care program or assistance. At least 20 institutions (87%) have formal policy or practice for the extension of tenure clock, on-campus child care, and unpaid parental leave. And 15 institutions (65%) offer paid parental leave. See details in Table 1.

Table 1. Work-life policies summary of the ADVANCE institutions in the AIM Network matrix

	Formal Policy or Practice	Informal Practice	Not Available
Dual Career Assistance	11 (48%)	10 (43%)	2 (9%)
Expansion of Tenure Clock	20 (87%)	1 (4%)	2 (9%)
Part-time Tenure Faculty	10 (43%)	3 (13%)	10 (43%)
Job Sharing	1 (4%)	7 (30%)	15 (65%)
Transitional Support Program	10 (43%)	3 (13%)	10 (43%)
Paid Parental Leave	15 (65%)	1 (4%)	7 (30%)
Unpaid Parental Leave	22 (96%)	0	1 (4%)
On-campus Child Care	20 (87%)	0	3 (13%)
Financial Assistance for Child Care	11 (48%)	0	12 (52%)
Elder Care Programs or Assistance	11 (48%)	0	12 (52%)

Note: a total of 23 ADVANCE institutions.

3.2 Review results from Murray State and comparable institutions

1) Dual career assistance: Murray State University Board of Regents adopted a Dual-Career Spousal Accommodation Policy during the June 2016 meeting. The language of the final Policy obtained from HR however, only allows eligible spousal accommodations in faculty and professional staff positions, which significantly limit the chance of accommodation. Only three comparable institutions have formal policy for dual career assistance.

2) Expansion of tenure clock: in the Murray State Faculty Handbook, probationary faculty may extend tenure clock by one year “if the faculty member experiences an extended life-changing event”. It is our understanding that the policy has been rarely used under extreme circumstances. Twenty-four (75%) out of the 32 comparable institutions have tenure clock expansion as formal policy. The extension of 2 years is most common (12 institutions), while 10 institutions including Murray State have policies allowing for a one-year extension.

3) Mentoring and networking: few comparable institutions have formal mentoring and networking programs (6/32). Murray State runs the New Faculty Academy, which covers various topics throughout the first year for new faculty.

Refer to Table 2 for other details.

Table 2. Review summary for Murray State and comparable institutions

	Formal Policy/Program	In Process /Draft	No/ Not Found	Murray State Policy/Program
Dual Career Assistance	3 (9%)	3 (9%)	26 (81%)	Yes
Expansion of Tenure Clock	24 (75%)		8 (25%)	Yes
Paid Parental Leave	10 (31%)		22 (69%)	No
Unpaid Parental Leave	31 (97%)		1 (3%)	Yes (FMLA)
On-campus Child Care	19 (59%)	1 (3%)	12 (38%)	No
Financial Assistance for Child Care	3 (9%)		29 (91%)	No
Mentoring and Networking	6 (19%)		26 (81%)	New Faculty Academy

Note: a total of 32 comparable institutions.

3.3 Examples of strategic interventions implemented by ADVANCE IT projects

The following examples are a selection of strategic interventions found in the StratEGIC Toolkit (Laursen & Austin, 2014).

1) Tenure and promotion:

- At University of Maryland - Baltimore County, procedures were formalized so that, by the end of their first semester, all newly hired faculty members will have worked with their department chairs to develop a personal career development plan.
- At Utah State, a promotion committee was established for each faculty member 3 years after promotion to Associate Professor to periodically review progress toward promotion to Full Professor.

2) Transitional support:

- The University of Wisconsin at Madison offers the Vilas Life Cycle Professorship Program to support faculty needs at critical junctures in their professional careers (e.g., birth or adoption of a baby, a death in the family, the period between grant funding).
- The Individual Growth Grants at University of Colorado Boulder were aimed at tenured faculty members making career transitions such as to begin new scholarly or creative directions or restart scholarly work after a significant period of university service.

3) Professional and leadership development

- The Sponsorship Program at CUNY Hunter College pairs a woman faculty (\$10 K) with a senior scholar sponsor (\$2500) to foster research success.
- Case Western Reserve's "hotline coaching" offers immediate mentoring over the phone to help women who have specific and immediate concerns.
- The Advancing Leaders Program at New Mexico State offered monthly luncheons and a 2-day retreat for faculty members interested in developing leadership skills.

4) Recruitment

- In the Engineering School at Kansas State, the Recruiting to Expand Applicant Pools Initiative supported senior faculty to take recruiting trips to sites or meetings likely to have large numbers of potential women candidates.
- The University of Rhode Island targeted hiring through its Faculty Fellows program, which provided 2- or 3-year fellowships for women who began as Fellows and transitioned into tenure-track faculty lines.

Conclusions

We could draw the following conclusions based on the review.

- 1) Most ADVANCE IT institutions (Cohorts 1 and 2) have spousal hiring policy, tenure clock expansion, parental leave policy, child care and elder care assistance.
- 2) Tenure clock expansion policy is common among most comparable institutions, and 2-year extension is the most popular.
- 3) Nearly all institutions have Employee Assistance Program that may provide referrals for child care and elder care.
- 4) Most comparable institutions do not have a formal spousal hiring policy, parental leave policy, or financial assistance for child care and elder care.
- 5) More comparable institutions have on-site child care than not.
- 6) Very few institutions have formal mentoring or leadership development programs.
- 7) There are plenty of innovative examples from other institutions for Murray State University to consider in the future.

We also note the following limitations of the review.

- 1) This policy review is based on information available online during the time the review was conducted. That we cannot find a policy online does not equal to its nonexistence. In addition, what we have found online may not be the latest version of the policy.
- 2) The review is about the availability of the policy in text only. It does not in any way imply the effectiveness of the policy in implementation nor the impact of the policies on the recruitment and retention of women faculty in the sciences.

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Appendix I. List of ADVANCE institutions included in the AIM Network work-life policies matrix

1. Case Western Reserve
2. CUNY Hunter College
3. Georgia Institute of Technology
4. Marshall University
5. Rice University
6. Texas A&M University
7. University of Alabama, Birmingham
8. University of California, Irvine
9. University of California, Merced
10. University of Colorado, Boulder
11. University of Illinois, Chicago
12. University of Maryland, Baltimore County
13. University of Michigan
14. University of Montana
15. University of Nebraska-Lincoln
16. University of Puerto Rico Humacao
17. University of Rhode Island
18. University of Texas, El Paso
19. University of Washington
20. University of Wisconsin, Madison
21. Utah State University
22. Virginia Polytechnic Institute and State University
23. Washington State University

Appendix II. List of Murray State's benchmarks and institutions similar to us in some aspects

Benchmark Institutions

1. Central Connecticut State University
2. Eastern Illinois Univ.
3. Eastern Washington Univ.
4. Frostburg State Univ.
5. Indiana State Univ.
6. Northwest Missouri State Univ.
7. Oakland University
8. Pittsburg State Univ.
9. Plymouth State Univ.
10. Rhode Island College
11. Southeast Missouri State Univ.
12. Stephen F. Austin Univ.
13. Univ. of Central Missouri
14. Univ. of Tennessee-Martin
15. University of Montevallo
16. University of Nebraska-Omaha
17. University of Tennessee-Chattanooga
18. Western Carolina University
19. Western Illinois Univ.

Institutions similar to Murray State University in some aspects

1. Appalachian State University
2. College of Charleston
3. Georgia College and State University
4. James Madison University
5. Longwood University
6. Radford University
7. SUNY-Geneseo
8. SUNY-Oneonta
9. Tennessee Technological University
10. The Citadel
11. UNC-Wilmington
12. University of Mary Washington
13. University of Montevallo*
14. Western Carolina University*
15. Western Kentucky University

* Overlaps with benchmark institutions