AdvanceRIT Connect Grants: Driving Momentum for Disruptive Change for Women STEM Faculty

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ABSTRACT

Women faculty are underrepresented in science, technology, engineering and math (STEM) disciplines. The ADVANCE Institutional Transformation project at a large private technical university (supported by NSF Award No. 1209115), referred to as AdvanceRIT, aims to increase the representation and advancement of women STEM faculty (which includes social and behavioral sciences, SBS, faculty) by removing barriers to resources that support career success and by creating new interventions and resources.

This paper reports on the development of efforts to activate change for STEM faculty in the form of an internal grant program, Connect Grants, as part of the AdvanceRIT project. The grants support leadership and career development for all tenured and pretenured faculty. The Connect Grants are outside of the normal processes and procedures as defined by the university. Support for the grants is also outside of the normal budgetary resourcing that is defined for the divisions, colleges, and departments. By providing a framework for the activities outside of the defined university processes and budget allocations, the AdvanceRIT project aims to support creative, innovative, and disruptive efforts toward reaching its end goals.

The grant program has two distinct funding tracks: one for faculty and one for department heads. The Faculty/Faculty Group Connect Grants are designed to broaden faculty opportunities and enhance plans of work associated with tenure and promotion preparation, as well as overall career advancement. Department Connect Grants support creative, innovative, and disruptive department-level efforts to guide and manage faculty through various career stages and project-oriented work to facilitate institutional transformation. Programming supported by Connect grants includes peer-to-peer mentoring, gendered citation disparities in philosophy of science, and post-tenure mentoring and leadership initiatives. Using evidence to support institutional transformation is critical; hence, the results of quantitative and qualitative data analyses informed the development of the Connect Grants program. This paper demonstrates how faculty climate and mentoring surveys, NSF Indicator objective data, and focus group results informed the development of this internal grants program. Additionally, it describes the framework for implementing this internal grants program and the outcomes of the awarded grants.

1. INTRODUCTION

When examining technological innovations, particularly in computing organizations, the concept of disruptive change is often a focus. Without the innovations that are enabled by change, technical organizations are unable to sustain themselves, let alone thrive. Research by Christensen, et al. suggests that three factors affect the abilities or inabilities of an organization to change: the organization’s resources, its processes, and its values. They also suggest that these factors are critical to the organization’s ability to innovate.[1]

Resources include equipment, people, cash, information, brands, and relationships with collaborators, suppliers, and customers. Christensen, et al. explain that an abundance of high-quality resources improves an organization’s ability to adapt to change.[1]

Processes include “the patterns of interaction, coordination, communication, and decision making employees use to transform resources into products and services of greater worth.”[1] This can include formal and documented processes, or informal practices that develop as part of a routine. Examples of common industry processes include those that are used to govern product development, manufacturing, and budgeting. In academia, these processes might include budget allocations, tenure and promotion decisions, and academic degree development and approval. All these processes have formal policies and
procedures. While informal negotiations likely occur, the mechanism by which they happen is not transparent.

The challenge of processes in the context of change is that processes are specifically designed to provide a consistent, effective, and efficient basis for performing tasks and are designed not to change. When processes are applied to situations for which they were not intended, the overall result can be sluggish performance. According to Christensen, et al., this conflict is most likely to be demonstrated in the informal practices that are part of an organization, specifically the “background processes that support decisions about where to invest resources.”[1]

The third factor affecting an organization is its values. Christensen, et al. define ‘values’ as “the standards by which employees set priorities that enable them to judge whether an order is attractive or unattractive.”[1] Employees at all levels of the organization make decisions to prioritize the directives, or charges, from the leaders within the organization.

According to Christensen and colleagues, “the factors that define an organization’s capabilities and disabilities evolve over time—they start in resources; then move to visible, articulated processes and values; and migrate finally to culture.”[1] The authors continue to explain, “When the organization’s capabilities reside primarily in its people, changing capabilities to address the new problems is relatively simple. But when the capabilities have come to reside in processes and values, and especially when they have become embedded in culture, change can be extraordinarily difficult.”[1] As disruptive innovations are oftentimes so irregular, organizations typically do not have routine processes or procedures for managing them. Because the nature of processes is to provide static routines, they are by their nature not flexible or adaptable, whereas resources are. For example, after 244 years in print, hard copy encyclopedias have been displaced by Wikipedia and other digital resources. The inability of hard copy encyclopedias to adapt to changing demands for lower price, unlimited size, and frequent updates led to their discontinuation.[2] Christensen also cites the example of Avid Technology, a company that produces television digital editing equipment. At one point, Avid Technology enjoyed extreme success as its editing equipment was exceptionally well received by the television community. However, the company was limited by having only one technology as its star product. As the market became saturated with competitors, Avid Technology’s stock price steeply declined due to a lack of effective processes for developing new products and for controlling quality, delivery, and service.[1]

Values, which derive from the organization’s priorities, are even less adaptable.[1] When working toward innovative practices, new processes and values will be required. New capabilities will also be necessary, and this requires managers and leaders to create a new organizational space where those capabilities can be developed. One way that management can accomplish this is by creating new and more flexible organizational structures to ensure that new projects are not forced to compete for resources with projects that are already part of the mainstream organization.[1]

The AdvanceRIT initiative aims to be a disruptive change, in effect to transform the entire value network of the organization. While work is being done to create long-term change through the creation of new policies and procedures, other efforts are underway to create change through the use of resources – both people and financial.

The Connect Grants program, with its top-down structure and bottom-up implementation strategy [3], is one of several drivers within the overall institutional transformation strategy. With a high number of technical faculty at the university, one would expect a predisposition toward embracing technological innovation and therefore disruptive change. Specifically, the Connect Grants are enabling disruptive change because they:
• provide the framework that facilitates change, as specified in the supporting Request for Proposals or RFP[4]
• support innovative change initiatives at the university
• are funded by resources that are separate from the mainstream university, college, or departmental budgets
• do not require a previously established routine, process, or committee for managing the grant projects at the university, college, or department level; rather the process is managed within the scope of the overarching AdvanceRIT project, and can be developed more quickly than a typical university-level initiative
• create a new organizational space where innovative capabilities can be developed

2. CONTEXT FOR CONNECT GRANTS
The ADVANCE Institutional Transformation project at the Rochester Institute of Technology (NSF ADVANCE Award No. 1209115), Creating Opportunity Networks for Engagement and Collective Transformation: Increasing the Representation and Advancement of Women Faculty @ RIT (AdvanceRIT), is an effort across RIT’s nine colleges, all of which include STEM disciplines. The project challenges the historically slow growth trends of women STEM faculty with the overarching goal of increasing the representation and advancement of this group, widely represented across ethnic, social, and cultural backgrounds. This project is based on the findings of an NSF ADVANCE Institutional Transformation Catalyst project entitled “Establishing the Foundation for Future Organizational Reform at RIT” or simply EFFORT@RIT (NSF ADVANCE Award No. 0811076)[5]. The three-year self-study included a climate study, objective data review, and benchmarking, all of which informed the current AdvanceRIT project.

The AdvanceRIT Institutional Transformation Project addresses two broad types of barriers facing women faculty: personal challenges and workplace issues. Personal challenges include work/life balance [6-8] and childbearing and child rearing decisions. Workplace issues include lack of mentoring [9-11], feelings of marginalization or isolation [16, 20-22], and the lack of sponsorship by senior colleagues [12, 13]. While the findings of the self-study are in line with other findings regarding women faculty in STEM, the current AdvanceRIT project seeks to disrupt the existing sluggish processes and practices on campus to accelerate and increase the attainment of project goals.

AdvanceRIT Project Goals and Organization

Goals
The AdvanceRIT project aims to: 1) refine and strengthen targeted institutional structures; 2) improve the quality of women faculty's work life; 3) align institutional, administrative, and informal systems of power and resources to support and sustain progress towards the project goals; 4) enhance the working environment and support career advancement for women faculty; and 5) establish a sustainable, inclusive, accessible network that supports career goals for all faculty. Specifically, the project goals are to:

1. Refine and strengthen institutional structures and install practices that promote representation and advancement of women faculty.
2. Enhance the working environment and support career advancement of women faculty through empowerment, inclusion, and other symbolic aspects of women’s professional quality of life.
3. Align institutional, administrative, and informal systems of power and resources to support and sustain progress shaping the political frameworks that impact representation and advancement of women faculty.
Organization

AdvanceRIT has adopted a multi-frame organizational analysis approach based on the work of Bolman and Deal [14] to improve understanding of organizational matters at RIT. This approach integrates several aspects of organizational theory, using each as a “frame” or “lens” for viewing the organization and for devising strategic interventions to change it [15]. This method has proven instrumental in understanding our organization and ensures that the set of proposed interventions are designed to positively impact RIT at structural, environmental, and political levels. It also has the potential to increase the momentum and longevity of successful project activities beyond the duration of the NSF funding by virtue of the broad and embedded nature of these interventions.

The five-year, multidimensional approach to this institutional transformation project incorporates over 20 interventions. One key intervention intended to promote disruptive change is the Connect Grants program.

3. CONNECT GRANTS PROGRAM DEVELOPMENT

The AdvanceRIT project, the university’s Faculty Career Development Services team, and the Office of the Provost collaborated to offer this new internal grants program intended to support leadership and career development for all tenured and pretenured faculty at the University. The Connect grants provided additional funding opportunities outside of the typical division, college, and department budget allocations for STEM and non-STEM faculty. By creating a new resource, competition for funding from mainstream sources within the university was eliminated, thus fostering innovation and change. NSF AdvanceRIT funding supported grants for women STEM faculty. The Office of the Provost provided additional funding to support grants that could not be funded by AdvanceRIT (grants for non-STEM and men faculty). Programming supported by Connect grants includes peer mentoring networks for pretenured faculty, post-tenure mentoring, and a study on gendered citations.

3.1 Connect Grants Program Rationale

Using evidence to inform decision-making is critical to motivating and creating strategies that promote institutional transformation. The AdvanceRIT research team gathered information from a variety of sources, and the results are being used to support data-driven programming initiatives that support overall institutional transformation efforts. This paper focuses on the Connect Grants program. Quantitative and qualitative data sources including the 2012-2013 COACHE Faculty Climate Survey[16], 2012 – 2013 Faculty Mentoring Survey[17], NSF Indicators of objective faculty-related data[18], and social science focus groups informed the development of the 2013-2014 Connect Grants Program Request for Proposals[4]. Syntheses of results from these data sources provide a compelling narrative and demonstrate the need to support leadership and career development resources for women and men faculty at RIT.

3.1.1 Faculty Mentoring Survey

The RIT Wallace Center’s Faculty Career Development Services program report, “Faculty Mentoring @ RIT Year 2” highlights faculty mentoring experiences based on results from an on-line survey sent in the spring of 2013 to all pretenured faculty at the University.[17] While women generally had a higher awareness and activity level within the mentoring program than men, opportunities exist to further enhance the positive impact asserted on women’s career navigation and leadership development. Key findings from the Faculty Mentoring Survey indicate that opportunities exist for faculty to be paired with mentors who:

- **Encourage grant proposal submissions.** Thirty-two percent of women and 41% of men were encouraged by their mentor to submit grant proposals.
• **Encourage publication authorship.** Fifty-six percent of women and 46% of men discussed authorship of publications with their mentors.

• **Discuss the tenure process.** Sixty-five percent of women and 66% of men discussed the tenure process with their mentors.

• **Are from outside the university.** Thirty-eight percent of women respondents had a mentor outside RIT, compared with 33% of men. Eighty-three percent of women respondents had an RIT mentor, compared with 76% of men.

• **Connect mentees with people who “fill in the gaps” to strengthen areas of less skill.** Twenty-nine percent of women and 31% of men indicated a need for this. Use of mentors from outside the university may support this area of need.

• **Offer advice regarding career/life balance.** Mentors offered advice in this area to only 24% of women and 28% of men mentees.

Qualitative data from the Faculty Mentoring Survey indicated a strong desire for more effective mentoring with formalized mentor training, appropriate mentor assignment/selection, structured guidelines for expectations and outcomes of mentoring relationships, and consistency in mentoring guidelines. While the mentoring program at RIT is overall considered a strong and valuable offering for the STEM and non-STEM faculty, it is also clear from the data that the faculty sees opportunities for refinements to the program that would require adjustments in mainstream procedures and resourcing.

3.1.2. COACHE Faculty Climate Survey Results from the COACHE faculty climate survey[16] conducted at RIT over the winter of 2012-2013 highlighted faculty perspectives on institutional strengths, areas for improvement, and satisfaction across twenty themed question categories. Of the 438 respondents, 151 of the 231 women faculty invited to participate responded (65%), and 287 of the 506 men faculty responded (57%). COACHE defines effect size as the measuring of differences between paired subgroups within a campus. Comparison among campus groups included pretenure tenure, associate/full; gender and white/faculty of color were reflected by small (between 0.1 and 0.3), medium (between 0.3 and 0.5), and large (greater than 0.5) effect size. Table 1 indicates questions where large and medium effect sizes were seen by gender in the COACHE survey results.

Table 1: Gender Differences in COACHE Survey Results

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>Survey Item</th>
<th>Gender Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>Reasonable Expectations as a Scholar and Community Member</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Effectiveness of Mentoring outside the Department and Institution</td>
<td>Men &lt; Women</td>
</tr>
<tr>
<td>Medium</td>
<td>Tenure Reasonableness; and</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Time Spent on Research</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Clarity of Tenure Criteria</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Laboratory, Research, and Studio Space</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Eldercare Policies</td>
<td>Women &lt; Men</td>
</tr>
<tr>
<td></td>
<td>Stop the Clock Policies</td>
<td>Women &lt; Men</td>
</tr>
</tbody>
</table>

RIT included an additional question: *How satisfied or dissatisfied are you with the quality of the long-
range career map/plan that you have created? Of the 404 respondents to this particular question (this excludes the 18 who did not respond), 52% of men and 55% of women respondents were very satisfied or satisfied with the quality of their plan. Eleven percent of the women and 16% of the men indicated that they did not have a long-range career map. Again, implementing a system that would enable the changes outlined above would require substantial resources and changes in formal policies and procedures. While these may be considered long-term goals of the university, in the short term, it would be beneficial to find other means of enabling positive innovative change.

3.1.3. Women of Color and Women Deaf and Hard-of-Hearing Faculty Focus Groups
As part of the overall AdvanceRIT project, Women of Color and Deaf and Hard-of-Hearing women faculty focus groups were conducted in Spring, 2013 to gather qualitative data. A common theme emerging from the data analysis from both groups was the women’s desire to interact in small group peer mentoring activities. This exemplifies another instance of an opportunity for which funding through mainstream sources may not be available.

3.1.4 NSF Indicator Data
According to the NSF Indicator Data for this university, women experience a career barrier regarding time in rank at the associate professor level (Table 1). This likely contributes to the downstream effect of the low percentages of women in the full professor rank (Table 2). Here, STEM faculty data is reported separately from SBS faculty.

Table 2: Percentage of STEM (excluding SBS) and SBS Associate Professors by Years in Rank and Gender

<table>
<thead>
<tr>
<th></th>
<th>% of STEM Faculty by Years in Rank at Associate Professor</th>
<th>% of SBS Faculty by Years in Rank at Associate Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7-9 years</td>
<td>&gt;9 years</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>19.5%</td>
<td>36.6%</td>
</tr>
<tr>
<td>2013</td>
<td>32%</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>19.7%</td>
<td>27%</td>
</tr>
<tr>
<td>2013</td>
<td>20%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Table 3: Percentage (Count) of STEM (excluding SBS) and SBS Women Faculty by Rank

<table>
<thead>
<tr>
<th></th>
<th>% (Count) of Women Tenured and Pre-tenured Faculty by Rank, STEM/SBS in 2010, 2012 and 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEM</strong></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>24% (98)</td>
</tr>
<tr>
<td>2012</td>
<td>24% (101)</td>
</tr>
</tbody>
</table>
4. **CONNECT GRANTS PROGRAM TRACKS**

The Connect Grants program includes two distinct funding tracks for tenured and pretenured women and men faculty. The first is a “Faculty/Faculty Group” Connect Grant available to individuals or faculty groups (formal or ad hoc groups), including tenured and pretenured faculty. The second is a “Department” Connect Grant for department heads or groups of faculty. For both tracks, successful grant proposals are required to support one or more of the AdvanceRIT project goals. Faculty/Faculty Group Connect Grants were designed to broaden faculty opportunities and enhance plans of work associated with tenure/promotion preparation and overall career advancement. Department Connect Grants support creative and innovative department-level efforts to guide and manage faculty through career stages, and project-oriented work to facilitate institutional transformation. While in line with the overarching values of the university, Connect Grants goals defined by the AdvanceRIT project are outside of the goals that are driving the day-to-day decision making processes at the university. By being outside process and resource allocation norms, the Connect Grants program provides a framework for innovative and disruptive activities and initiatives for STEM faculty.

**Faculty-Faculty Group Connect Grants**

Successful faculty grants (individual or group) are related to career advancement and/or leadership development opportunities associated with faculty members’ abilities to advance and achieve their career and professional goals.

Proposals are required to list a project mentor with a clear summary of the role of the project mentor over the project’s duration. Funds cannot be used for faculty or staff salary or for capital equipment purchases. Several examples of topics for Faculty Grant proposals were posed by the AdvanceRIT Leadership Team and included within the RFP to spur creative, innovative, and disruptive thinking. Examples included:

- **Social Resources/Social Networking Proposals**
  - Strengthen faculty’s professional visibility in national/international networks.
  - Utilize social resources including the development of professional websites to support new networks among RIT faculty and within professional disciplines.

- **Research Proposals**
  - Support successful research proposal development or re-submission efforts for external funding.
  - Expand research and/or writing capabilities to enhance competitive proposal development and submissions.
  - Promote interdisciplinary and trans-disciplinary research and teaching collaborations among faculty peers external to the university. RIT faculty may identify a mentoring relationship with a
prominent female or male scholar from outside RIT to support their professional development. This may include formal peer-to-peer reciprocal visits to institutions.

• **Professional Development Proposals**

  o Sponsor and coordinate a Women Visiting Scholars colloquium series.

  o Present research at national/regional conferences.

  o Offer specialized training to support research and teaching (i.e. computer software training or budget development).

  o Engage the assistance of an external career/leadership coach.

Each of the examples illustrates an opportunity for disruptive change, as they are activities that would typically reside outside of the norms as defined by the current process, procedures, and budget resource allocations.

The Connect Grants Review Committee (see details below) was provided a rating sheet developed by the AdvanceRIT Program Director. Each committee member rated all the grant proposals using a Likert scale on the following criteria:

• Relevance to
  a. AdvanceRIT goals and rationale
  b. faculty plan of work or department mission/goals

• Quality of
  a. project plan
  b. project mentor/role description
  c. outcome and impact description
  d. proposer’s CV
  e. recommendation letter
  f. budget plan

Overall scores were then used to provide initial discussion points for the committee review session. Every grant proposal was discussed in detail. Feedback was provided to the Principal Investigators (PIs) of the declined proposals.

**Department Connect Grants**
Department heads/chairs and academic unit directors were encouraged to use the Connect Grants program to support creative, innovative, and disruptive department level-led efforts to guide and manage faculty through career stages, and project-oriented work to facilitate institutional transformation. Again, the funds could not be used for faculty or staff salary or for capital equipment purchases.

Examples of topics for Department Connect Grant proposals posed by the AdvanceRIT Leadership Team in the RFP included:

• Department/College-level creation, implementation, and dissemination of Best Practices and Professional Development Models
• Leadership-in-Action type grants designed to support grass-roots efforts, organizational development, website construction, research to inform change, or other self-identified areas of need

• Sponsorship of keynote speakers and workshops on topics such as building transparency, negotiating dual-career hires, the changing funding environment, establishing career goals, network development, unconscious bias, best practices in recruiting, and broader impact issues

5. CONNECT GRANTS PROPOSAL REQUIREMENTS
The AdvanceRIT leadership team managed the Connect Grants program submissions. By managing the submissions and logistics outside of the formally defined process and procedures of the university, the concept of disruptive change was further supported. All proposal submissions were required to include:

• A two-page maximum CV for each applicant including current academic rank, department, and contact information for the project PIs.

• A narrative statement using the AdvanceRIT Connect Grants Rationale to support the need for the grant. The narrative was required to address the relevance of the proposed work to the faculty member’s plan of work, faculty group (formal or ad hoc) scope of work, or relevance of proposed work to stated department mission/goals. The narrative was also required to include a detailed research/activity plan, timeline, itemized budget, and the intended or desired outcomes and how they would be measured.

• One recommendation letter from the Department Head (for Faculty/Faculty Group grants) or College Dean (for Department grants).

Awardees were also required to be willing to disseminate project outcomes and experiences through participation in university-wide workshops, panel discussions, and presentations.

6. CONNECT GRANTS AWARDS PROCESS
The Connect Grants Review Committee received 23 grant proposals in the initial offering in the winter of 2013-2014. AdvanceRIT leadership team members, based on their continued support of the AdvanceRIT goals, nominated committee members. A cross-university (eight of nine colleges represented), mixed-gender (five women and three men) and mixed-rank (one assistant, four associate, and three full professors) faculty selection committee reviewed the submissions and recommended funding decisions to the AdvanceRIT leadership team.

Of the 23 proposals received, 20 were submitted by women and 14 were submitted by STEM faculty. Eight proposals were funded, seven from women faculty, four of which were in STEM. Five funded proposals involved faculty groups. The average funded request was approximately $7,500. No budget restrictions were defined other than what is allowable under the grant rules so that proposers were not limited.

Topics supported in the first round of funding include peer-to-peer mentoring; gendered citation disparities in philosophy of science; application of the Appreciative Inquiry Process; post-tenure mentoring and leadership initiatives; re-submission efforts for successful external funding; and effective mentoring and leadership skills for deaf and hard-of-hearing women faculty.

The group grant funded from the College of Computing focused on peer-to-peer mentoring of women associate professors across departmental boundaries. The proposal identified plans to establish a group to meet weekly for activities such as peer editing, targeted computing grant proposal writing and career-life balance discussions including remote call-ins from faculty role models at other institutions.
A faculty member from the Department of Biomedical Engineering was funded by a Connect grant to develop a peer mentoring network. This project included addressing the challenges raised by the reviewers of a declined grant submission, leading to resubmission of this proposal. This was accomplished using an external mentor who provided guidance on designing effective experiments. This process enabled the grantee to broaden mentorship to other experts in their research area and supported their professional development by establishing their research lab and assisting with becoming known as a research scholar.

All of the projects reflected the energy around an offering for organic and innovative approaches for disruptive change that promote the AdvanceRIT goals. This energy was again realized as the grant projects were formally awarded during the AdvanceRIT official program launch. Approximately 100 faculty and staff joined to celebrate the AdvanceRIT project and recognize the Connect Grant recipients.

7. MEASURABLE OUTCOMES OF CONNECT GRANTS
The eight Connect Grants awardees in the first offering generated numerous activities and products that spurred discussion, initiated change and advanced the overarching project goals. As of March 2015, significant progress has been made in many of the grant projects. Two of the projects developed professional mentoring groups for the faculty awardees, and together these projects produced research resulting in four conference presentations, a journal-submitted manuscript, and four grant proposals (one of which, to date, has been funded).

One Connect Grant project resulted in an animated film (The Iroquois Creation Project) that is scheduled to premiere at a regional arts center in July 2015.

Two prominent speakers for the “Women in Science Lunch and Discussion Series” for 2014-2015 have been booked. Dr. Lynne Maquat (Professor, University of Rochester) is a distinguished professor of Biochemistry and a member of the National Academy of Sciences. Dr. Susannah Gal (Professor, University of Binghamton), a Director at the NSF, visited the RIT campus and gave grant writing advice to women faculty.

The Women in Science (WISe) Effective Leadership Workshop was held in January, 2015 with over 20 attendees. Jane Tucker from COACH [19] led a one-day workshop for women and minority women faculty members from across campus. This workshop was designed to give participants some basic concepts of leadership and allow them to explore what is known about gender and its role in leadership situations, reflect on their own leadership challenges, and do some self-assessment and planning to identify/develop areas for skill enhancement. The workshop, which was open to women faculty at every rank, included a variety of instructional approaches, including presentation, small group discussion, and experiential learning. Jane Tucker has over twenty-five years of experience in higher education in both the administrative and teaching areas. She has taught negotiation skills in the Fuqua School of Business at Duke and is currently a consultant educator for COACH through the National Science Foundation. Survey feedback from the session indicated high levels of satisfaction, with all respondents who answered in the assistant professor group agreeing or strongly agreeing (only 12% did not answer this question) that they gained knowledge that can be applied in their professional development. Specific topics or information that they would apply included competitive salary negotiation, strategies and preparation for negotiation, interviewing, retaining information and continuing the conversation and building mutual connections.

Another Connect Grant project held two workshops in Appreciative Inquiry (AI) for College of Liberal Arts women faculty. One workshop was facilitated by Dr. Jeanie Cockell, an internationally recognized Appreciative Inquiry expert and practitioner, as well as a former higher education administrator and co-author of the book Appreciative Inquiry in Higher Education: a Transformative Force (John
Additional workshops are planned to develop detailed action plans to address issues identified during the first workshop session, and AI has become a method of approach for multiple groups on campus, unrelated to the original grant project.

Another project, “Post-Tenure Mentoring,” is well underway. A body of literature on post-tenure mentoring, work-life balance among women in academe, mentoring for women, academic job satisfaction, and related topics is being annotated and collected in an online repository. The Post-Tenure Mentoring project launched a three-part series on post-tenure mentoring that included a panel session featuring women faculty who are full professors who discussed the path to promotion, a workshop on the importance of post-tenure mentoring and a mid-career planning session for post-tenure faculty. This project also led to an influential white paper on mid-career promotion issues for women.

The “Effective Mentoring and Leadership Skills for Deaf and Hard-of-Hearing Women Faculty at the National Technical Institute for the Deaf (NTID)/RIT” project is also well underway. In April 2014, Dr. Liisa Kauppinen, an internationally renowned human rights activist, visited the RIT campus to discuss high-level strategic leadership and effective mentoring. These topics are directly related to the goal of strengthening deaf and hard-of-hearing women’s professional visibility in national/international networks. Dr. Kauppinen presented to the Deaf and Hard-of-Hearing Women's Connectivity Series session, gave an open forum, delivered a more focused presentation to all women faculty at NTID (deaf, hard of hearing and hearing), and met with leadership to discuss future international endeavors. This project resulted in four captioned, signed, and voice-interpreted video presentations that were released.

Each of the projects describes innovative efforts from faculty that would typically not fit within the normal funding framework within the university. While some of these efforts may lead to long-term process or procedure changes, the Connect Grants provide an opportunity for these efforts to be realized in a shorter timeframe. The Connect Grants also provide an opportunity for the AdvanceRIT leadership team to evaluate the impact of the work and potentially provide a model for other universities as they look for ways to implement disruptive change for innovation.

Collectively these outcomes show that the Connect Grants awardees have generated intellectual products and career momentum that positively promote the AdvanceRIT goals.

8. NEXT STEPS FOR THE CONNECT GRANTS PROGRAM

After the close of the Connect Grants Program review for the first round of funding, feedback was solicited from the selection committee in regards to the process and the RFP in an effort to make refinements for subsequent rounds of funding. Highlights of committee members’ recommendations included:

• moving the application to an online format
• separating out applications for review based on prospective funding source (AdvanceRIT versus Office of the Provost)
• reviewing applications based on a more defined set of broader impacts and intellectual merit
• requiring direct connections between the proposal and the faculty member’s annual plan of work
• refining what is to be addressed in the required letters of support
• requiring more detailed information around requests for travel funding (i.e., justifying the rationale for gaps in departmental travel funding)

The detailed feedback from the review committee suggests a high level of commitment by the faculty and demonstrates willingness to contribute to efforts that exist outside of the normal process and procedures and budget allocations of the university. Many of these suggestions have been implemented during the process for the second round of funding, which is planned for the spring of 2015.
9. ACKNOWLEDGMENTS
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