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Work In Progress: Serendipity and Synergy in Promoting Equity

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WIP: Serendipity and Synergy in Promoting Equity

Introduction

In 2021, in the aftermath of COVID-19, two events occurred at the South Dakota School of Mines and Technology (SD Mines) that significantly impacted each other: the institution was awarded an NSF ADVANCE Adaptation Grant (NSF EES 2121601), and the Office of Faculty Development and Advancement (OFDA) was created. While they had different paths to creation, they share common goals and a synergy that are beneficial to the success of each. The way in which these two programs developed, overlap, and ultimately strengthen each other is described in this paper, a work-in-progress demonstrating the synergy between these two serendipitous events in creating support for a more diverse and engaged faculty.

A Tale of Two Initiatives

Part 1: Campus Culture and Gender Equity
In late 2018, a group of individuals on campus met to discuss that the culture on campus needed to be changed to be more supportive and inclusive for all faculty. As is often the trajectory of such meetings, the group discussed developing a proposal to support their ideas; in this case, that meant an submission to NSF ADVANCE Program.

The NSF ADVANCE Program has been providing funding for over 20 years to institutions in support of faculty gender equity. Per the NSF website,

> *The goal of the National Science Foundation's (NSF) ADVANCE program is to increase the representation and advancement of women in academic science and engineering careers, thereby contributing to the development of a more diverse science and engineering workforce. ADVANCE encourages institutions of higher education and the broader science, technology, engineering, and mathematics (STEM) community, including professional societies and other STEM-related not-for-profit organizations, to address various aspects of STEM academic culture and institutional structure that may differentially affect women faculty and academic administrators[1]*

SD Mines has been involved in two previous NSF ADVANCE grants: the first was a Catalyst grant that investigated hiring practices, mentoring, and maternity leave (NSF 0811258); the second was a state-wide grant that focused on policy development to impact gender equity (NSF 1463993). Based on these efforts, the group discussed the types of grants available and determined that the most appropriate would be an ADVANCE Adaptation Grant focused on changing the culture on campus to retain female faculty, adapting strategies that had been successful at other institutions. These included the Advocates and Allies Program (A&A) developed as part of the North Dakota State University (NDSU) ADVANCE Institutional Transformation grant[2], cross-disciplinary mentoring including Mutual Mentoring[3] and facilitated peer mentoring circles[4], and policy review. The proposal was originally planned for submission in January 2020; a decision was made to hold off until January 2021.

Shortly thereafter, COVID-19 hit.

Part 2: Faculty Development (FD)

Elsewhere on campus in 2018, FD was housed in the admissions office with a FD coordinator and the help of a FD committee. The role of FD coordinator was part-time, and the budget was primarily used to fund a travel grant for early career faculty and to bring in periodic guest speakers or workshops. In September 2019, the individual assigned to FD left their position, leaving a vacancy on campus and no immediate plan to fill the void. Also in the Fall of 2019, a new interim provost was appointed.

Shortly thereafter, COVID-19 hit.

NSF ADVANCE Empower and OFDA

While no one would suggest that the Spring of 2020 will be looked back upon fondly, the chaos that ensued when campus had to immediately pivot to online learning inadvertently led to some positive impacts on campus. The FD void was felt broadly with no central location to address the fact that over 70% of campus faculty had never taught a course entirely online, and 50% had never taught *any* portion of a course online. This led to a renewed interest in having an FD program on campus. A research scientist and former tenured faculty member was appointed in the short term to help develop programming and resources for faculty. That individual had experience as a PI and Co-PI, respectively, of the two previous ADVANCE grants and had joined the ADVANCE team at approximately the same time to help with the mentoring efforts of the proposal.

Serendipitously, the PI on the proposal recognized the importance of centralized FD to an inclusive campus culture and had written into the proposal funding for a faculty development coordinator (FDC) who would oversee all-campus mentoring programs. In addition, the PI had included the new provost as a Co-PI and had gained a commitment to institutionalize the FDC position after completion of the grant.

In January 2021, the ADVANCE grant was submitted to NSF; at the same time, the temporary FD coordinator was transitioned to a new position of Director of Faculty Development. On similar parallel tracks that summer, NSF awarded the institution the ADVANCE Adaptation Grant (Empower), and the Office of Faculty Development and Advancement (OFDA) was formally created.

Mutual Support for Campus Culture and Faculty Equity

OFDA and Empower share similar visions for a more equitable and supportive campus culture for all faculty. As stated in the Empower proposal, "The overall goal of the project is to change from a culture of attrition to a culture of development and improve diversity and inclusion of SD Mines faculty. The objectives of the project are:

- Raise awareness of implicit bias
- Improve campus culture to be more inclusive

- Create a heightened sense of belonging and engagement of faculty
- Develop pathways for success of faculty in all tracks and ranks

These objectives are directly in line with the vision of OFDA, "to cultivate and support a vibrant campus culture where faculty members feel supported, valued, and challenged to grow both personally and professionally from hire to retire[5]." The programs have supported each other in efforts to create a supportive an equitable culture for faculty members.

While it may not be uncommon for NSF ADVANCE programs on a university campus to benefit from FD programs, it is not clear how often the opposite is true. At SD Mines, the FDC position in the proposal was initially intended to help fill the faculty development void; with the creation of OFDA and the director position, the funding for this position has instead helped OFDA grow. The office now includes both the half-time director and a full-time faculty development coordinator, a position that will continue after the end of the grant. Currently the FDC is working with the grant team, but is also facilitating the peer mentoring program outlined in the grant and developing FD programming based on feedback during mentoring sessions. This position, along with OFDA's commitment to creating campus networks, provides a natural means to institutionalize this area of Empower programming.

One component of Empower is annual all-campus meetings, by rank, to create and reinforce a culture of mentoring on campus. To actively engage faculty in these sessions, OFDA and Empower developed the idea of strategic planning sessions for faculty development. The events were developed to improve the sense of belonging and engagement as described in the Empower grant. The strategic planning sessions provided feedback to administrative units on campus on areas such as promotion and tenure, salary equity, work environment, and need for support / resources. They also significantly improved the visibility of OFDA and its responsiveness to faculty needs. One reason Empower and OFDA are working within ranks is due to the distribution of women on campus. The majority of women faculty are in non-tenure track teaching positions. In addition, new policies and guidelines being developed under the grant are providing clearer paths for advancement in non-tenured positions.

Empower helped to fund the creation of facilitated peer mentoring circles. This program, housed in OFDA, provides networking across disciplines for faculty members in the same rank. Peer groups include lecturer track, research scientists, assistant professors, associate professors, and full professors. There is also a group for female faculty that spans all ranks and disciplines, and additional circles may be added for other cross-cutting groups. After a year and a half, nearly 25% of campus faculty members are in a mentoring circle. As previously stated, the new FDC is coordinating and facilitating the program. In FY 2023 over 90% of survey responses indicate that participants feel that the topics in the program are important to them and that they would recommend mentoring circles to their colleagues.

Of particular benefit to both programs is feedback from the peer mentoring groups. To date, suggestions from circular peer mentoring have supported development of Promotion and Tenure Success Panels for Instructors, Assistant Professors, and Associate Professors, an NSF CAREER Roundtable discussion with recent recipients, and an upcoming roundtable discussion on sabbatical leave. These offerings directly address transparency in faculty advancement, develop networks between departments on campus, and demonstrate responsiveness to faculty needs in

creation of a more developmental campus culture. In addition, the mentoring circles provide a mechanism for anonymous, aggregated feedback from faculty to the administration. Over 90% or participants also responded favorably to trusting their peers and the moderator of their mentoring circle, indicating the psychological safety requisite for candid communication.

Assessment for both programs is mutually beneficial. The campus statistics gathered by Empower and assessment of programs such as the adaptation of NDSU's A&A program help to inform OFDA on areas of faculty concerns, demographics of faculty, and equity in P&T decisions and salary. OFDA is currently assessing faculty belonging and engagement through an adapted version of the Cornell Sense of Belonging instrument[6] and is administering both formative and summative assessments of the mentoring program. These will provide Empower with the means to assess the objective of creating a heightened sense of belonging and engagement. The impact of Empower and OFDA are likely to be seen over a much longer time frame than can be measured during the grant; but the support of OFDA by Empower will allow OFDA to continue to support and monitor success through continued assessment.

Conclusions

The NSF ADVANCE program supports programming aimed at improving the representation of women in STEM faculty, and FD programs provide support to help faculty advance in their careers. At SD Mines, the serendipitous development of OFDA in sync with receipt of an Advance grant has allowed both programs to pursue programming to help change the campus culture from one of attrition to one of support while augmenting each other's efforts. Empower has helped OFDA grow with institutional commitment, and OFDA provides a mechanism to institutionalize Empower initiatives. The support and active engagement of the provost ensures that the institution supports the culture change from attrition to support, necessary for the recruitment and retention of a diverse and vibrant faculty. While the initiatives of both groups are still in progress and continuing to grow, the synergy of the two create a whole that is greater than the sum of their parts for campus change.

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