The Research Leadership Development Initiative (ReDI): Fostering Potential in Mid-Career Faculty

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Academic leaders typically come into their roles directly from faculty ranks, but the transition from faculty member to leader can be challenging. The authors present the development and evaluation of a cohort-based faculty leadership program for mid-career faculty. Based on post-program focus group data, participants expressed increased confidence in leadership ability and a greater understanding of university administrative functions. Within three years of program participation, a review of faculty curriculum vitae revealed that 53% of the participants had transitioned into leadership positions in university administration. Underrepresented minority and female faculty moved into leadership roles more frequently than others. This study demonstrates how university-based leadership programs can prepare and prime faculty for moving into administrative positions.

Introduction

cademic administrative leaders, defined here as department chairs, program or center directors, associate deans, deans, provosts, and chancellors, are often recruited from the faculty ranks based on the strength of their scholarship, track record of accomplishments, and leadership potential (Strathe & Wilson, 2006). This progression is likely based on the premise that universities benefit from promoting from within because of the wealth of faculty experience within the specific context of academia. A recent study identified a list of competencies important for effective leadership within academia (Anthony & Antony, 2017). In addition to managing and facilitating change, academic administrative leaders must also maintain a culture of academic excellence that protects faculty autonomy and academic credibility; employ communication and advocacy to develop and promote the successes of the individuals in their units and across multiple levels of the university, including senior leadership; and navigate the complexities of the university's organizational structure. Academic administrative leaders, then, need a wide variety of skills to be effective in their roles.

Notably, the core skills required to be an effective academic administrative leader are distinct from and additive to those needed to be an effective

faculty member and include the ability to build and manage diverse teams, lead change through faculty governance, and craft strategic plans. Requisite leadership knowledge and skills can be acquired in a variety of ways. For example, behavioral coaching seminars, boot camps, and institutional peer and near-peer mentoring are ways that new and aspiring leaders can gain skills to be effective in their roles (Kiel, 2017, 2019; Robison & Gray, 2017). Kiel (2017) highlighted the value of investing in coaches to increase the effectiveness of university leaders and pointed out that while coaches are widely used in the corporate world, they are much less frequently utilized in academia.

Faculty leadership programs are increasingly being promulgated on the national landscape by highly respected organizations and institutions. Programs such as the American Council on Education Fellows program (https://www.acenet.edu/Programs-Services/Pages/Professional-Learning/ACE-Fellows-Program.aspx), Drexel University's Executive Leadership in Academic Technology, Engineering and Science, and Executive Leadership in Academic Medicine (https://drexel.edu/provost/initiatives/elates/about/) programs, The Chair Academy (https://www.chairacademy.com/index.html), and the Higher Education Resource Services program (https://www.hersnetwork.org/

programs/hers-institute/) are widely recognized as intensive leadership training programs for those interested in academic leadership. In addition to skill-building, some of these programs focus on enhancing participant self-perception as leaders and fostering confidence in their leadership capabilities (Magrane & Morahan, 2016; McDade et al., 2004). Others rely more heavily on one-on-one mentoring and coaching with an experienced leader (Grotrian-Ryan, 2015). In contrast, some programs incorporate training on the explicit challenges and politics of being a leader for a particular gender (Madsen et al., 2012) or position (Filaii, 1999). There are also national-level leadership academies for community college leadership, for example, that are well known for their efforts to prepare community college leaders (Amey, 2000; Hassan et al., 2009). Well-established leadership programs that are disciplinary or super-disciplinary in nature, such as seminars offered by The Association to Advance Collegiate Schools of Business (https://www.aacsb. edu/), have been described as beneficial for building networks and understanding discipline-specific challenges (Cavaliere & Mayer, 2012; Peach et al., 2007). While such national programs provide valuable skills and give participants an opportunity to expand their professional networks and gain perspectives from many different institution types, they are not without limitations, including expense, selective enrollment (for some programs), and lack of focus on the specific needs of any one institution (Helitzer et al., 2016).

The need for leadership skills, especially those that apply to specific institutional contexts, has inspired some universities and organizations to create formal leadership training programs for targeted groups. University-based programs impart requisite skills, foster the transition from scholar to leader (Kezar & Lester, 2014; Kiel et al., 2015; Templeton & O'Meara, 2018), and present the opportunity to leverage institution-specific development among aspiring leaders while reducing cost and time away from campus. The National Science Foundation ADVANCE program (https:// www.nsf.gov/crssprgm/advance/) stimulated the creation of several university-specific leadership programs through institutional transformation and leadership awards with the aim to develop a more diverse science and engineering workforce through increased representation and advancement of women (National Science Foundation, 2018). Templeton and O'Meara (2018) described their NSF-funded program at the University of Maryland and provided positive program evaluation data indicating enhanced knowledge and leadership networks and increased access to institutional leadership. Similarly, Kiel (2019) reported interesting findings from a 10-year study of a peer mentoring program for department chairs designed to support and acclimate them to the complicated role of running an academic department.

The demand for leadership programs is high, but the research behind what makes these programs successful is lacking (Ely et al., 2011; Kezar & Lester, 2014). Lucas et al. (2018) reported that 93 of 94 medical schools indicated that they had some form of leadership training; however, relatively few (~30%) published outcome data and only one quarter used a competency-based model for training. In fact, leadership development programs have not, as a rule, been highly successful in developing leaders (Ashkenas & Hausmann, 2016; Beer et al., 2016; Bregman, 2013; Rowland, 2016; Gmelch & Buller, 2015; Williams, 2013). Tsoh and colleagues (2019) suggest that this may be due to measurement difficulties, in that the emphasis in most studies has been on assessing program satisfaction rather than ascertaining actual learning or whether participants have achieved a leadership position. In the current study, we address this limitation with an objective inquiry into whether participants attained leadership roles after program participation.

To contribute to the existing literature, we present the design, implementation, and evaluation of a university-based leadership training program titled the Research Leadership Development Initiative (ReDI) Program. The ReDI program was designed to provide requisite leadership development to post-tenure faculty to expand their research agendas, to lead larger-scale research grants and centers, and to be trained for future potential administrative leadership appointments. The program's primary goal was to create a cadre of professors prepared to take on academic leadership roles by increasing skills and experience required for crafting and communicating vision and working through others while enhancing participants' self-awareness. Collectively these focus areas build a "leadership muscle" and

prepare faculty to lead in a diversity of academic settings, including in their departments and at the university administrative leadership level.

In this article, we expand upon the literature in three ways: One, we report the theory, design, and development of our curriculum; two, we measure program outcomes using both qualitative and objective measures; and three, we provide lessons learned to benefit colleagues contemplating faculty development programs at their institutions.

Method

The ReDI program was initiated in 2012 to strengthen the faculty leadership bench at Northeastern University and was funded through a National Science Foundation (NSF) ADVANCE Institutional Transformation grant (HRD-0811170). The program was developed by a design team that included the ADVANCE grant leadership team (SWF, JR), Associate Director for Learning and Organizational Development (Human Resources), the Gordon Institute for Leadership, and a consultant expert in leadership training (SN).

Participants

Annually, the ReDI program solicits from college deans nominations of associate and early full professors who have demonstrated strong academic records and the capacity to grow into formal leadership roles. College deans each nominate three to four faculty per year, aiming for a cohort size of between 15 and 20 participants with an intentional representation across demographics and disciplines to create a diverse (underrepresented minority, URM, which we define as Asian, Black, and Latinx faculty) and inclusive cohort each year. Since its inception in 2012, 83 faculty have participated in ReDI (57% women, 30% faculty of color, 11% from historically underrepresented groups). Most program participants were tenured associate professors (60), followed by full professors (16), and full-time teaching professors (7).

Due to the nature of the NSF ADVANCE program, the first cohort of ReDI included primarily STEM faculty. However, to make the program supportive of all disciplines, faculty representation from non-STEM fields was solicited beginning in 2013. To date, faculty from all colleges have participated in ReDI: Arts (5), Business (6), Computer Science

(10), Engineering (20), Health Sciences (14), Law (1), Professional Studies (2), Science (13), and Social Sciences and Humanities (15).

As part of the original NSF ADVANCE grant, the ReDI design team created a six-month program with the following goals: 1) to create a cohort of diverse faculty prepared to take on leadership roles; 2) to provide development activities that help participants recognize the importance of leadership and associated skills within their own growing research groups and collaborations; and 3) to offer an opportunity to acquire and exercise key leadership skills (Wadia-Fascetti et al., 2014). With these goals in mind and close ties to theory, research, and competencies described in the literature, the design team worked with leadership consultants to develop the curriculum. Additionally, data collected from the program participants in the first pilot year of the program were used to inform and revise curriculum content.

Theoretical Framework

Leadership is an activity that can be exercised regardless of position, formal role, or authority (DeRue & Ashford, 2010). It is not unidirectional. Rather, the leadership relationship is based on mutually reinforcing identities between leaders and followers that entail a set of claims (as leader) and grants (as follower). The identities are social and are conceptualized according to three levels: individual, relational, and collective.

For ReDI, we combined elements of two leadership theories, strengths-based leadership (Clifton & Rath, 2009) and servant leadership (Patterson, 2003), with three levels of identity to create a novel, three-pronged framework: Vision (collective purpose and direction), Other (relational), and Self (individual). Wanting to capture the importance of the distinctions among leadership, authority, and management, the resulting leadership framework was developed and coined as "VOS": Develop a Vision, Work through Others, and Know your Self. We used this framework in close conjunction with leadership competencies in the literature to design the curriculum components for each of the V. O. and S elements. The detailed curriculum, directly tied to the VOS framework, is presented in Table 1.

Table 1. Curriculum components and the Vision/Other/Self Framework

Curriculum component	Goal	Rationale
	Vision out beyond own area and from day-to-da nal perspective. Learn how to form and o	
White space: a practice to create space for strategic thinking uncluttered by tactical noise. (Nawaz, 2011)	Set faculty up for success by creating space for strategic thinking and visioning.	A practical way for participants to dedicate unin- terrupted time for strategic thinking based on the experience of hundreds of leaders who have put this into practice through the consultant's coaching and teaching practice.
Institutional case study: talk by an institutional leader about how they created, implemented, and communicated a major institution-wide vision for their initiative.	Learn by example through the successful envisioning and implementation of an institutional initiative.	Participants need a successful example of creating and realizing a vision within the institution.
Expand capacit	Other	nd influence others
Discussion about groups and stages of group	ty to build relationships, work in teams, a	Leadership involves a great deal of work in groups.
development (Tuckman,1965).	form.	Leadership involves a great dear or work in groups.
High-performing teams: what teams get right and wrong.	Gain valuable insight into project management in teams with diverse stakeholders.	Help participants understand the way they interact with others, their role on a given team, and gain aptitude to lead teams.
Conflict navigation: responses to conflict and how to move forward (Argyris, 1982; Nawaz, 2016).	Enhance ability to address conflict early through utilization of a variety of assessments, tools, and role play.	Expose participants to frameworks to better understand the causes of and reactions to conflict to improve their ability to adapt on an individual basis.
Power and politics: types of power and the importance of considering the political implications of decisions and actions (French & Raven, 1959; Heifetz & Linsky, 2017).	Expand understanding of how to discern the broader political landscape, motivations of various constituents, and sources of power. Elevate ability to be effective, visible, and influential.	Participants learn effective use of each source of power and the importance of wielding power responsibly in order to gain the trust and respect of stakeholders. They also learn to assess the motivations, values, loyalties, and losses of each constituent and how to connect with them and through a common purpose.
Communicate across cultures: develop a more complete view of how differences impact interactions (Hofstede et al., 2005; Meyer, 2014).	Solidify understanding of elements that comprise culture and how to effectively navigate across differences.	Help participants understand various cultural dimensions and how differences manifest themselves through a blend of theory and interactive exercises.
Evnand cana	Self city to understand own strengths and res	enonse to conflict
Strengths-based leadership: excelling through		Participants are encouraged to focus on the areas
a focus on strengths (Buckingham & Clifton, 2001).	by leveraging existing strengths. Com-	of strength rather than weakness in order to gain confidence in their existing leadership ability.
Conflict navigation: identification of common responses to conflict, and how to address them (Argyris, 1982; Nawaz, 2016).	Increase self-awareness of modes of conflict each person deploys and areas of gaps.	Help participants understand typical reactions to conflict and the most effective ways to deal with each type of response.
	Vision-Others-Self combination	
Cohort challenge: cooperative project focused on an institutional challenge (Hewlett et al., 2014).	Apply toolkit workshop lessons while also benefiting the institution through recommendation on a real-world challenge.	Participants gain valuable practice using skills introduced during workshop. Small working teams utilize elements of VOS to collaborate on a university-wide challenge, create a vision for it, and communicate recommendations to senior university leadership.
ReDI alumni panel: panel of previous ReDI participants who share their experience.	Proactively harness lessons learned from ReDI alumni.	Participants learn from ReDI alumni what they have learned, cover all aspects of VOS, and demonstrate results of their learning in their careers and jobs.
Deans panel: panel of current academic deans.	Learn about institutional leadership and pitfalls through the lived experience of senior leaders.	Participants hear from institutional leaders and begin to identify how current leaders incorporate the skills discussed in the workshop into their everyday

experience as leaders.

Strengths-based leadership is a model whereby potential leaders focus their efforts on building their own strengths as well as those of others. One fundamental premise of strengths-based leadership is that change can be achieved when efforts are focused on improving strengths rather than fixing weaknesses. Clifton and Rath (2009) categorized 34 broad strengths themes into four types: executing, relationship-building, influencing, and strategic thinking. Thus, in leadership training, attention to identifying and capitalizing on an individual's strengths in these areas and translating them into the tasks of leadership is critical.

Servant leadership theory contends that the best leaders are those whose motivation to lead comes from a need to serve rather than the pursuit of leadership for one's own gain. Van Dierendonck (2011, p. 1254) noted, "Servant leadership is demonstrated by empowering and developing people; by expressing humility, authenticity, interpersonal acceptance, and stewardship; and by providing direction." We translated servant-based leadership concepts into the curriculum by focusing on both the self and on others across the curriculum. Both leadership models, strengths-based and servant, emphasize the ability to think strategically to create a vision for the organization that considers both the leader's skills and strengths and the importance of working with others with whom the leader interacts.

Based upon these two leadership theories, the ReDI program curriculum was designed to teach practical and effective leadership skills informed by the literature (Calás & Smircich, 2009; Collins & Strowd, 2020; DeRue & Ashford, 2010; DeRue & Myers, 2014; Eagly & Carli, 2007; Ely et al., 2011; Ely & Meyerson, 2000; Kolb & McGinn, 2008; Madsen et al., 2012; Sturm, 2001) and the Gray and Rivers' (2012) study of leader performance in university-based cooperative research centers that underscores the broad qualities that leaders must have to be successful. Based on this literature, several competencies for effective leadership can be ascertained: aptitude to lead diverse constituencies; understanding differences; ability to obtain and manage resources; project management skills; ability to gain the trust and respect of stakeholders; integrity; conflict management; developing and championing a vision; and communication skills. Of particular importance was to increase participants'

self-awareness of their own personal styles and their individual strengths, while also helping participants learn about the university and how to work with others who represent different perspectives. The curriculum was intentionally experiential to increase faculty participants' ability to identify effective university solutions while also self-advocating to university leadership for positive changes in the creation of a shared vision.

Curriculum Components

Based on the VOS framework, the ReDI program consists of three core components: 1) Four-day skill-building workshop; 2) How the University Works speaker series; and 3) Cohort Challenge. The program begins with a four-day intensive skill-building workshop where participants learn the VOS framework to foster an evaluation of their own communication styles and strengths, to impart strategies to manage change while considering different stakeholder viewpoints, and to develop an understanding of the merits of leadership styles, sources of power, and their vision for leadership. During this four-day workshop, curriculum components are focused on learning to create a vision when in a leadership role and to better understand how the vision connects with the broader university (V). Simultaneously, program elements focus on teaching participants to recognize the important role of colleagues and administrators in the work of leadership as they learn how to effectively run teams (O) and to increase their self-awareness with a focus on individual strengths as they navigate new leadership roles (S).

The intensive skill-building workshop is followed by four, once monthly, "How the University Works" seminars during which participants learn from administrative leaders about institutional priorities and the workings of units around the university. This series is designed to provide university-wide information to participants as they contemplate a transition into leadership roles in the future. In each of these sessions, a presentation by a leader who oversees a large unit of the university (e.g., research development office; government relations; legal unit; financial planning) affords participants the opportunity to learn the inner workings of a part of the university that they, as a faculty member, have had little exposure to in their current role. Presenters

are asked to talk about their own leadership journey in terms of vision, self, and other, and to connect their role at the university to the faculty so that participants can better understand the need to broaden their view as they move into leadership positions.

As a culminating experience and opportunity to use the skills acquired, participants are grouped to collaborate on a Cohort Challenge, a team project in which they craft and present a solution-focused proposal toward a university goal or challenge. Topics for the team project are based on priorities outlined in the university's strategic plan or timely issues identified by the program development team. Examples include integrating institutional research systems, improving the university's relationship with the surrounding community, and focusing on the diversity of students and faculty to enhance global academic excellence. Diverse and interdisciplinary teams are paired with "subject matter experts" who are well-versed in current university initiatives related to each topic to provide the teams with context and assist in narrowing the scope of their project. The final product is a white paper and a presentation to senior institutional leadership. Teams meet regularly and present a draft of their work for critique by program leaders prior to the final presentations, allowing them to further hone their pitch before meeting with senior leadership. The final proposals are presented to the provost and other senior leaders, including participants' deans who nominated them for ReDI. Through this process, participants learn how to tackle a university-wide problem, evaluate different solutions, create a vision for problem-solving, and make a pitch to a senior leadership audience. In turn, the institution's senior leaders (i.e., dean, provost, chancellor) get to see and hear the new putative leaders in action, thus increasing their visibility and putting these faculty onto their "potential leaders" radar for the future.

Evaluation

To assess the program's effectiveness, we analyzed two types of data: participant leadership trajectories as captured on curriculum vitae (CVs) and focus group interviews. The components of the curriculum align with the outcomes in several ways. One, our quantitative CV data provided an objective examination of whether our primary goal, to create a cohort of diverse faculty prepared to take on greater leadership roles, came into fruition.

We also assessed whether our effort to emphasize leadership training and opportunities for women and URM faculty was successful. Two, our qualitative focus group data allowed us to evaluate multiple curriculum elements via conversations with faculty participants and identify themes and outcomes related to our content areas. Our curriculum emphasis on vision, other, and self was translated into focus group questions in each of these areas. The study was approved by the Institutional Review Board at Northeastern University.

Leadership Trajectories

We defined academic leadership as movement into university administrative positions such as department chair, program or center director, dean, provost, and chancellor levels (and their "associate" or "vice" roles). While we recognize other forms of leadership, such as leadership of research teams and committees, these were not tracked. To determine the number and type of university administrative positions attained by ReDI alumni, we collated data from the CVs of 68 of 83 (81.9%) program participants. University administrative positions and start dates were extracted and counted. Each administrative position was counted once.

Focus groups

To identify and understand specific components of the ReDI program that may have led to leadership roles, we conducted focus group discussions with participants. The program development team invited participants from cohorts three and four to participate in four 60-minute focus groups in 2017, two to three years after program completion. The researcher met six of 12 total participants in ReDI cohort three and 10 of 16 participants from ReDI cohort four in focus groups of two to four participants. All participants were invited via email to participate in the study. The researcher organized groups according to availability. Due to scheduling constraints, two individuals (one from each cohort) were interviewed individually.

The protocol for the focus groups included twelve questions designed to explore the program's impact on participants (See Supplemental Materials). Specifically, the researchers sought to understand how and whether their participation in the ReDI program:

- enhanced the participant's professional career
- transferred new leadership skills
- affected how they lead and/or participate in teams
- changed how they perceive themselves as leaders
- enhanced how they work with diverse groups
- assisted in developing a vision
- resulted in new relationships
- resulted in new leadership opportunities

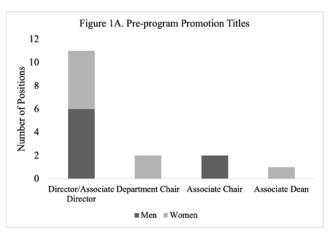
All participants signed consent forms, focus group conversations were recorded, and audio files were sent to an outside vendor for transcription. All identifiers, beyond gender, were removed from transcripts to protect privacy. Qualitative data from the four focus groups and two individual interviews were analyzed using thematic analysis to identify and report patterns or themes within the data (Clarke et al., 2015). The researcher read all transcripts several times, noted initial themes that emerged and marked the transcripts with initial codes, collapsing and expanding the codes as more data were coded. From the codes, the researcher generated a list of themes that was then reviewed and revised by the team.

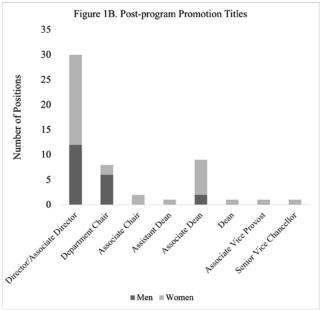
Results

We obtained updated CVs from 68 of 83 ReDI participants (81.9%). Sixteen of 68 (24%) participants held leadership positions before participation in ReDI (Figure 1A). Of those, 11 were program directors or associate program directors. Within three years of participating in ReDI, 53% of ReDI alumni transitioned into new administrative leadership positions (Figure 1B). These positions were more diverse and at higher levels compared with those held before participation and included department chairs, associate deans, a dean, and a vice provost. Overall, the number of leaders represented in all positions increased from pre- to post-program.

Women outpaced men in the acquisition of leadership positions. After ReDI, 46% of female participants and 29% of male participants held at least one university leadership role. Female participants, more often than their male counterparts, moved into upper-level administrative positions such as dean and vice provost (Figure 1B).

With respect to our URM participants, it is notable that all three Black female faculty participants moved into leadership roles after program participation (two department chairs and one associate dean). Two of six Latinx faculty also transitioned into leadership roles (one female dean and one male department chair). Interestingly, none of the sixteen Asian faculty, twelve of whom were in the STEM disciplines, transitioned into administrative leadership roles throughout our study.





To understand program outcomes qualitatively, sixteen of 28 (57%) ReDI participants from cohorts three and four participated in focus groups. Four themes about what they most valued from program participation were identified: confidence, networks and visibility, continuous learning, and a greater understanding of university administration and decision making. Table 2 provides examples of quotes related to each of the four themes.

Table 2. Focus Group Example Quotes

Themes	Quotes
Increased Confidence	Comparing to two years ago, I feel a lot more confident Because of [the] program when someone raises an issue, I can see it from multiple perspectives [within the university]. I never did [that] before.
Expanded Networks and Visibility	[T]he primary value for me in ReDI, [was] the opportunity to meet people from other departments and other colleges in an environment that lets you get to know them and what their skill sets and knowledge bases [are].
Continuous Learning Process	I know that [ReDI] was a great first step but it's not enough because these are things that you have to always be reminded of It really is [about] constant learning, and you always have to think that there is more to learn about, not to get too comfortable in the role.
Greater Understanding of University Administration and Decision Making	What I learned about were the sort of competing motivations and competing demands on how decisions are made. I felt like I learned that those decisions are made in ways that are informed by many more perspectives than I originally understood. It wasn't so much learning the process pieces but understanding how the decisions themselves were made and what the hierarchy was of decision-making criteria.

Focus group participants (11 of 16 or 69%) reported a positive shift in self-confidence as a result of participating in the program. The shift toward increased confidence began with the invitation to participate in the program and continued to build beyond the end of the program. Nominations from college deans signaled interest and belief in the participant's leadership potential which translated into a feeling of validation and increased confidence in specific areas that included networking abilities, working across disciplines, understanding university systems, understanding vision, and determining their career path and goals. This sense of greater confidence translated into saying 'yes' when asked to move into a leadership position and an increased sense of self-efficacy to successfully take on the new role.

Participants nearly universally valued the opportunity to meet and build relationships with faculty outside of their departments. Some described friendships that resulted from participation in ReDI, and others described the sense that there is a "ReDI network" of colleagues who can be trusted based on interactions at ReDI, or simply the shared experience of completing the ReDI program. Participants described agreeing to serve when invited by someone they knew as a ReDI alum and also calling on other alumni when they themselves needed to bring a team together. In addition, the ReDI program became recognized throughout the university for its excellence in leadership training, resulting in ReDI alumni being tapped by university leaders

to participate in and lead university initiatives and committees. Professional relationships not only expanded but also grew stronger after the program. Two primary tools mentioned in the focus groups were a better understanding of the motivations and intentions of others and a better understanding of oneself, which allowed for stronger team management and influenced how the participants interacted with others.

Several participants described ReDI as a part of a continuous learning process, expressing that they felt they built a foundation of skills via ReDI, and were now more intentional about personal development and had a greater openness to learning new things. This was particularly helpful to participants as they moved from their role as faculty members to their role as leaders, a transition that often requires a great deal of new learning (e.g., as in the role of becoming department chair). The focus on self and other throughout ReDI was noted as a strong component of the training.

Participants in both cohorts also reported a better understanding of the way the university and its administration work. This knowledge was gained in part by hearing university leaders speak during the four-day workshop, the How the University Works sessions, and, in part, by ReDI participants interviewing various constituents across the university in preparation for the Cohort Challenge project. Working across disciplines with fellow ReDI participants gave individuals a window into other parts of the university. Participants reported

a better grasp of the "bigger picture" of how various systems operated beyond their typical lens of observation as well as the realization of their part within the broader university.

Discussion

Consistent with previous research on national faculty leadership programs (Filaii, 1999; Magrane & Morahan, 2016; McDade et al., 2004), our data revealed increased confidence in leadership capability as a major outcome of participation in ReDI, gained through the combined components of the ReDI program and the focus on strengths-based (Clifton & Rath, 2009) and servant (Van Dierendonck, 2011) leadership. The week-long intensive leadership skills development workshop imparted the necessary skills identified in the literature as critical to successful leadership (DeRue & Ashford, 2010; Gray & Rivers, 2012; Madsen et al., 2012), including crafting and championing a vision, leading diverse constituencies, understanding and dealing with conflict, and assessing the political landscape. The How the University Works seminars provided access to leaders who spoke frankly about their experience navigating the university leadership landscape. We found that while the team project provided experiential and practical knowledge specific to the university and experience developing and negotiating real university initiatives, the added component of managing an interdisciplinary team provided participants with an opportunity to collaborate and grow internal networks they found to be beneficial. Sustained engagement with active, upper-level administrators throughout the program increased participant visibility and respect as potential leaders. Taken together, the increased confidence fostered by the ReDI curriculum likely enabled program alumni to accept leadership positions when existing leaders sought them out as opportunities became available.

The focus group data link nicely to the CV leadership trajectory data as reflected in a doubling of leadership positions attained post-program. We can speculate that the skills attained, as discussed in the focus groups (e.g., greater confidence, better understanding of the wider university, openness to new learning), were important variables in being chosen for a leadership position and saying yes when asked or throwing their hat into the ring when

a position became available. We also believe that the visibility attained via program completion was a factor in the eventual opportunity for leadership.

National trends indicate the need to be overtly intentional to create diverse cohorts. Despite receiving 50% of doctoral degrees since 2006, there is a progressive decline in the number of women in the professoriate, such that women comprise fewer than 30% of upper-level leadership positions (Bichsel & McChesney, 2017; Johnson, 2017). Representation among leadership ranks by people of color is even lower. In 2013, faculty of color, defined in this study as all non-white faculty, accounted for only 14% of senior leaders and just 12% of university presidents (Gasman et al., 2015). By requiring that each cohort include at least 50% women participants and actively recruiting URM faculty, the ReDI program development team made deliberate strides toward creating gender and racial equity in academic leadership. The success of this requirement is demonstrated by the high percentage of alumni, particularly women, who moved into leadership positions. Moreover, several studies have reported the need for cultural change spearheaded by trained academic leaders to augment and sustain the movement toward equity among leadership ranks (Chun & Evans, 2015; Montgomery, 2020). In the future, the program development team plans to add curriculum components on leading culture change, especially in the area of diversity, equity, and inclusion.

A finding of note is the leadership trajectories of our URM faculty participants. In our CV review, we found that all (N = 3) and 33% (2 of 6) of our Black and Latinx faculty participants, respectively, attained leadership positions post-program. We speculate that participation in the faculty leadership program may have addressed both the invisibility and hypervisibility issues described by URM faculty (Settles et al., 2019), and that program participation was instrumental in their being offered leadership positions. Invisibility may be experienced in a lack of recognition or exclusion related to scholarship and expertise (Turner et al., 2008). It is possible that ReDI participation decreased invisibility by increasing recognition by leaders as they considered potential new leaders. Settles (2019, p. 72) suggested that universities should "create environments in which faculty of color experience positive visibility, that is, for them to have recognition, legitimacy, and authority rather than the 'wrong' type of visibility associated with hypervisibility. Further, for visibility to be positive, individuals must have control over their image and be recognized in ways that affirm their identities (e.g., academic identity)." Participation in ReDI for underrepresented minority faculty may have addressed some of these issues.

Reflection

Faculty leadership programs are not uncommon at universities and academic medical centers (Baker et al., 2019; Tsoh et al., 2019). Our contributions to the literature and our theory-based program focused on recruitment, assessment of outcomes, and increasing visibility, as detailed below.

First, ReDI was based in theory and directly links leadership competencies to curriculum. As noted in Lucas' (2018) survey of academic medical center faculty leadership programs, less than 30% of programs connect the competencies needed for leadership to the actual program components. Our connection was clear and intentional.

Second, while a team project is a common feature of leadership programs, a unique aspect of our program was the presentation of the project back to those who made the nominations, i.e., those who are in a position of power to appoint future leaders (provost and deans). Thus, the deans who nominated participants for the program saw them again six months later as they presented the work of their cohort challenge team, which increased their visibility to senior leaders who now "knew" these faculty in a different way.

Third, as highlighted by Tsoh et al. (2019), studies of leadership development rarely include data on whether participants actually become future leaders. We provide objective data, over time, indicating that participants in ReDI did go on to attain leadership roles, as evidenced in their CVs. Obtaining objective data, rather than only subjective reports of program success, is a unique feature of our work.

Finally, our data highlighted that our intentionality to create cohorts that were greater than 50% female and recruited specifically for URM faculty may have contributed to the attainment of leadership positions for the groups. As recognized by Norman (2019, p. 52), institutions need to diversify the range

of faculty who participate in leadership programs and the "bench of talent." Baker and Manning (2021) highlighted the imperative to focus on intersectionality for mid-career faculty advancement. Our intentional efforts to include people from various identities and disciplines in our program was an effort toward this end.

Our data support the conclusion that ReDI is an effective university-based leadership development program. Limitations include that not all participants provided data and the lack of a control group. Thus, a direct assessment of the impact of ReDI would benefit from a comparison to a group of faculty members who did not participate in ReDI.

Conclusion

Senior faculty are routinely promoted into leadership roles in academia; however, the challenges faculty face when transitioning into these positions are often underappreciated. University-derived leadership training programs offer an opportunity to identify leaders, foster confidence in leadership skills, promote institution-specific growth and development, and accelerate the transition into leadership roles. The ReDI program prepares mid-career faculty leaders by increasing self-awareness, providing skill development, establishing a deeper understanding of university administration, and creating a visible opportunity to practice applying new skills and knowledge.

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Supplemental Material

Focus group questions:

- 1. Did participating in the ReDI program influence your career? If yes, how?
- 2. Do you see and/or understand the university differently after participating in ReDI?
- 3. Have your networks with colleagues changed as a result of participating in ReDI?

- 4. Is there any impact from participating in ReDI either professionally and/or personally, either internal to the university or external?
- 5. Do you think participating in ReDI will impact you in the future?
- 6. Do you have suggestions for improving ReDI?
- 7. Were there any changes in your self-awareness as a leader?
- 8. Did any research collaborations change as a result of ReDI?
- 9. Tell me about any changes in your grant writing activities.
- 10. Have you had leadership opportunities in the last two years as a result of ReDI?
- 11. Has your future trajectory changed as a result of participating in ReDI?
- 12. Has your approach to negotiations changed as a result of ReDI?

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