Positive Leadership: An Intentional Approach to Faculty Leadership Development

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Abstract

As Michigan Engineering (the University of Michigan College of Engineering) moved forward after the tumultuous pandemic years, College leaders recognized the need for concerted professional development in positive leadership. This evidenced-based practice paper discusses a year-long positive leadership development program for engineering faculty and staff members, which was grounded in research from the University of Michigan Center for Positive Organizations and a "learn-experiment-reflect" framework. The program was delivered through six in-person cohort sessions, self-paced learning via videos and articles, and weekly emails to boost learning. Core concepts in the program included abundance gaps, positive emotions, gratitude, purpose-finding, the fundamental state of leadership, generalized reciprocity, positive energizers, and high-quality connections. An analysis of data from end-of-program surveys, budget narrative statements, and retrospective interviews revealed that faculty participants valued the program design; experimented frequently with gratitude, high-quality connections, and generalized reciprocity; and wrestled with the challenges of authentically enacting positive leadership principles in academia. The paper closes with recommendations for implementing positive leadership programs in other engineering higher education contexts. Examples of faculty experiments are supplied, as well as a program timeline and interview protocol.

Introduction

After functioning heroically during the pandemic, the leaders at Michigan Engineering (the University of Michigan College of Engineering) were exhausted and overwhelmed, like so many university faculty and staff around the nation who had contended with the challenges of a rapid transition to online education, complex decisions around re-opening, student disengagement, and isolation. With concern for the leaders' well-being and the flourishing of the college, the dean engaged the Director of Leadership Development in Michigan Engineering to bolster organizational health and effectiveness through an executive-level leadership development initiative. What emerged was a year-long positive leadership development program that inspired our leaders to learn, experiment with, and reflect on positive leadership approaches, which in turn initiated a culture shift in the College. This paper defines positive leadership and supplies a rationale for its use in our context; describes the program model that we implemented; identifies data-gathering mechanisms; and discusses key findings and recommendations for delivering positive leadership-based training to engineering faculty and staff leaders.

Background and Motivation

STEM professors rarely pursue or receive formal leadership education even though they regularly direct laboratory groups, develop research collaborations, and manage teaching teams [1]. This trend persists even as a growing number of engineering colleges offer leadership

development programs for undergraduate and graduate students, recognizing that the global economy requires excellent communication, collaboration, and interpersonal skills as well as technical prowess [2]. More broadly, few academic administrators in United States public research universities have undertaken coursework in human resources, leadership, organizational psychology, or behavioral psychology, and many are plagued by role strain, compromised health, and burnout due to this lack of preparation [3]. Such difficulties were understandably compounded by the demands of crisis leadership during the pandemic.

In this context, the Michigan Engineering Director of Leadership Development reached for a powerful tool: positive leadership. Building upon Maslow's terminology [4], Seligman and Csikszentmihalyi proposed a "positive psychology" that focuses on studying healthy, mature, and fulfilled people, rather than centering on those suffering from psychological illness, an approach which Seligman promulgated to leaders in a variety of professional communities [5]. At the U-M Center for Positive Organizations, Cameron, Dutton, and Quinn arrived at four key positive leadership strategies: 1) cultivate positive climate through gratitude, compassion, and forgiveness; 2) foster positive relationships by developing networks of energizing, motivating colleagues; 3) engage in positive communication through emphasis on others' strengths; and 4) construct positive meaning by helping people leverage their core values and callings [6]. Jeffrey Buller has subsequently highlighted indicators of positive leadership in academia, such as underscoring what's working well and what is possible, encouraging supervisors to prioritize time with their best performers, honoring team members as individuals who can make reasonable decisions, emphasizing rewards over penalties, and valuing people over productivity. Far from starry-eyed idealism or denial of problems, positive leadership springs from learned, measurable optimism that enables people to create positive outcomes from difficult situations [7].

Our mobilization of positive leadership principles for Michigan Engineering was inspired by several factors. Most notably, its effectiveness is well-documented, with numerous studies demonstrating that positive leadership results in heightened employee morale, collegiality, job satisfaction, innovation, and productivity [7]. In fact, Seppälä and Cameron's thousands of interviews of leaders and employees reveal that positive relational energy is the greatest determinant of an effective leader, though it is also underutilized [8]. Moreover, positive leadership is particularly impactful during times of crisis, enabling resilience and inclusion [9], which were certainly needed in the wake of the pandemic and social justice reckoning in the United States. Finally, positive leadership is based on simple, inexpensive actions that have outsized impact [10], which helped us to strategically steward resources during an uncertain time.

Positive leadership is a departure from traditional academic culture, where administrators are often preoccupied with identifying deficiencies, engaging in critical analysis, and considering past data rather than examining strengths and imagining what might be possible [7]. The engineering process itself has historically been problem-based, fueled by a desire to remedy

broken systems and grounded in a competitive, demanding, and exclusive culture [11]. Published two decades ago, *The Engineer of 2020* by the National Academies anticipated that future engineers would require deep training in collaboration and cross-cultural interactions, with pedagogy that accommodated a breadth of learning styles and drew upon the social sciences and humanities [12]. Although this forecast has begun to be realized, Jensen's recent editorial urges present-day engineering higher education leaders to shift from a culture of stress and suffering to wellness and thriving [13]. Vanasupa's 2020 treatise likewise champions a new form of engineering education that is founded on loving kindness and empathy, rather than the suppression of emotion [14].

Program Overview

Prior to the pandemic, Michigan Engineering had made significant headway in fostering an inclusive, positive institutional culture, but in the spring of 2022, data from departmental climate surveys and 360 evaluations suggested that the community was overwhelmed by near-term challenges and operating in reactionary mode. There was a sense of cultural decay, as leaders struggled to notice what the organization was doing well. The dean, his executive team, and the Director of Leadership Development began to lay plans for a concerted, systemic leadership development program that would help College leaders to remember and imagine the organization at its best, with its strengths at the forefront of their minds. Carrying these goals, the leadership director then partnered with a positive leadership external consultant to produce a year-long, research-based Michigan Engineering Positive Leadership Program, driven by several questions: What kind of culture do we hope to create with the engineering leaders? How can we focus on the opportunities that have emerged from the pandemic years? And how can we build enough belief in positive assumptions to inspire engineering leaders to try something new?

The leadership director and external consultant set forth four key objectives. The Michigan Engineering Positive Leadership Program would enable participants to 1) learn about key principles of positive leadership; 2) develop shared language and practices around positive leadership; 3) conduct, share, and reflect on experiments with positive leadership principles in day-to-day life; and 4) expand and deepen connections with colleagues. The director and consultant then curated content from the consultant's broader positive leadership curriculum to generate five major units of study that aligned with Michigan Engineering's strengths and needs: positive emotions and purpose-finding; generalized reciprocity; positive energizers and high-quality connections; the fundamental state of leadership; and abundance gaps. (See Appendix A for a glossary of these concepts.) Key metrics of success were participants' frequency of experiments with positive leadership concepts; frequency and depth of reflection and intentionality in leadership; attention to positive developments in the College; and perceived level of social connection with colleagues.

Fundamental to the design of the leadership program was a professional development framework of "learn-experiment-reflect." (See Figure 1.) Namely, after learning a positive leadership concept, participants would be prompted to own their professional development by integrating their knowledge into day-to-day practices, such as running a meeting, mentoring a student, or negotiating for space. Given the participants' scientific background, the faculty developers purposefully chose the language of "experiments" to describe these embedded practices. Learners would then be called into individual and collective reflection and meaning-making, which reinforced learning. This positive leadership learning process could be undertaken at both personal and organizational levels, resulting in transformed practices and the emergence of new phenomena in the institutional culture.

Figure 1: Theoretical framework for Michigan Engineering Positive Leadership Program

Concurrent with the program design was the identification of target participants. At the recommendation of members of the College executive leadership team, and to promote psychological safety during tumultuous times, the fifteen department chairs and the dean's cabinet members constituted one learning cohort while the staff leaders (unit administrators and directors) populated a second cohort.

The Michigan Engineering Positive Leadership Program was delivered through six in-person sessions from August 2022 to May 2023, as seen in Figure 2. The first five sessions were ninety minutes each, with a two-hour season finale as session six. The kick-off session, which was incorporated into the annual Michigan Engineering Leadership Retreat in late summer 2022, invited participants to reflect on their leadership experiences over the pandemic years and introduced the concepts of positive emotions and gratitude. Sessions two and three occurred in fall of 2022, focusing on generalized reciprocity, positive energizers, and high-quality connections. Sessions four and five, which occurred in the winter and spring of 2023, unpacked the fundamental state of leadership–a psychological state in which leaders are other-focused, results-centered, internally directed, and externally open. Related concepts were empathy, purpose-finding, core values, and growth mindset. Following the news of the dean's transition to a provost role at another institution, the season finale addressed strategies for leading through transitions and leveraging abundance gaps. This sixth session also featured a well-received

positive leadership card game, in which class participants presented real-life requests for help and other players shared cards to recommend particular strategies.

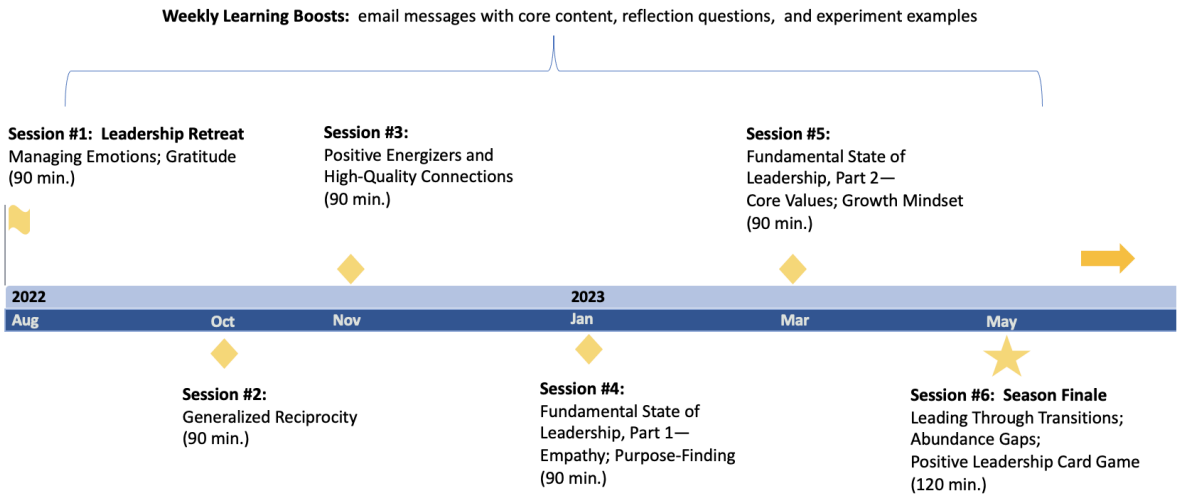

Figure 2: Timeline and content for Michigan Engineering Positive Leadership Program

A sizable chunk of learning occurred outside of the formal sessions, in accordance with the pattern of learning, experimentation, and reflection. From the outset, each participant received the entire purchased curriculum with links to videos, articles, and reflection questions to allow for self-paced learning and further dissemination. (See Appendix B for reflection questions.) Prior to each session, the faculty developers invited participants to devote thirty minutes to pre-meeting work. The director of leadership development also sent a weekly "learning boost" email message that highlighted one positive leadership principle; shared experiments in positive leadership undertaken by cohort members; and invited submission of additional learning moments. (See examples of experiments in Appendix C.) To reinforce training concepts, the leadership development team created a customized positive leadership toolkit for the College.

All sessions were conducted in-person, relying on a cohort learning model, with solo and paired work, group discussions, exercises, and question and answer interactions. The external consultant, who served as the facilitator, established a consistent rhythm across the sessions: overview of program and session-specific objectives; individual reflections on recent experiments, followed by share-outs in trios and then with the full group; delivery of new content, including the research base and practice activities; and finally action planning, in which participants identified takeaways and concrete next steps.

Methods of Data Collection

End-of-Program Evaluation: At the conclusion of the program, both faculty and staff participants were asked to fill out an anonymous, online evaluation, with Likert scale and

open-ended questions. 34% of the overall participants completed this assessment. On average, the respondents attended 5 of the 6 sessions. (See Appendix D for quantitative results.)

Budget Narratives: As a means of accountability in the College-level annual budget review process, each unit leader was asked to respond to the following prompt: "Describe specific steps you have taken in your unit to implement the key elements of positive leadership training. Describe the short-term impacts and your long-term plans."

Interview Protocol: With IRB approval, the twenty faculty participants in the Michigan Engineering Positive Leadership Program were invited to participate in a confidential, individual 45-minute interview seven months after the program's conclusion. Fifteen faculty members expressed consent, nearly all of whom had attended a high number of training sessions and continued to hold Michigan Engineering leadership roles following the training. A leadership development staff member not involved in the program's design or delivery conducted the interviews, providing the interview protocol (see Appendix E) and redistributing the Michigan Engineering Positive Leader Toolkit for each interviewee's optional review. Although the interviews were not recorded, detailed notes captured respondents' answers and especially notable phrasing.

Results

Narrative and interview responses were aggregated, themed into overarching patterns, and compared against the quantitative data. This analysis surfaced several key findings, to be discussed in terms of design, content, context, and value.

Design: Overall Commendation

In both the end-of-program evaluations and subsequent interviews, faculty participants largely commended the design of the Michigan Engineering Positive Leadership Program. Most frequently, they spoke of the effective balance between lectures and interactive activities, focusing especially on the value of table discussions with their colleagues. As Warren (a pseudonym) explained, "It's been helpful to have a community of department chairs, to share common challenges and issues that we face." Several respondents observed that such interactions progressed beyond ordinary professional exchanges to include deeply meaningful reflections, with Greg underscoring "bonding and bridge-building" as "important facets of the training." Such sentiments align with the quantitative data from the end-of-program assessment, in which faculty expressed agreement with the statement, "I feel more connected to my colleagues," with a 4.2 rating out of 5 maximum on a Likert scale. Prized, too, was the emphasis on research-based instruction. Charles remarked, "I liked the academic component, the studies. You see that your instinct is correct—that this isn't just a good way of approaching leadership and your team, but it's actually effective. That appeals to me as an engineer." While participants conveyed appreciation for the short video vignettes and case studies, the curricular resource that

was most often lauded was the deck of playing cards with positive leadership concepts on them. That two faculty members spontaneously pulled out the card decks during the interviews attested to their everyday utility for application of program concepts. Two others described using the card game as a valuable problem-solving heuristic in team meetings.

When it came to areas for improvement, faculty participants offered differing perspectives on the pacing of the program, with some desiring a more compressed sequence of sessions and others preferring more time to reflect and process in between meetings. Although a few suggested that certain material was repetitive, one respondent wished for more review to enable connections between concepts. Despite rare complaints about the pre-work for each training session, faculty participants indicated that they did complete the assignments and reviewed pertinent content beforehand. Overall, we were challenged to build in even more adaptations for differences in personal learning styles and needs.

Content: Centrality of Gratitude, High-Quality Connections, and Generalized Reciprocity

Whether faculty participants were describing experiments undertaken or areas for personal growth, their comments demonstrated a deep engagement with course concepts. Overwhelmingly, respondents focused on the topic of gratitude. Simon incorporated gratitude into email messages to his department and team members, reflecting, "I'd say that I've gotten a very positive response. I have some people who are emailing back, 'You're welcome.' I wouldn't have gotten that back in the past." For other faculty members, gratitude was expressed through handwritten notes or public announcements, with a priority on delivering accolades with specificity. Interestingly, Lisa and Olivia spoke of the relative ease of experimenting with gratitude because it could be expressed independently, without requiring collaboration or buy-in from others. Olivia noted about gratitude and positivity, "As someone entering the job, I could do these things right away, even without knowing much about the culture." She chose to begin each faculty meeting with a special feature called "Best of [her department]," in which an announcement or learning opportunity was implemented to highlight a strength of the community. As she put it, "People have come to count on it and ask what's the 'best of our department' this time. I've been pleased at how it has been received." In keeping with this emphasis on gratitude, faculty rated the statement, "I am sharing more positive things that are happening in the organization" a 4.1 out of 5 in the program assessment (see Appendix D).

Other positive leadership concepts that emerged frequently in faculty participants' commentary were high-quality connections and generalized reciprocity, often with some interrelation. Helen perceived the dire need for relational connection in her once closely-knit department, where nearly one-third of the faculty composition changed during the pandemic. Motivated by the "compelling" and "actionable" research on high-quality connections, she has incorporated relationship-building activities into all faculty meetings, from one-word check-ins to more extended personal discussion. Since engaging in the Positive Leadership training, Derek has also

dedicated time in each faculty meeting for a lighthearted discussion question, such as recommending favorite restaurants in the area or preferred educational technology. Teresa experimented with a reciprocity circle in a departmental meeting, in which each person issues a specific request for assistance, and listeners have the ability to provide resources or guidance. By her account, it was "quite useful for people to think about how to help each other and how to ask for help." These trends aligned with real-time observations of the training sessions, where reciprocity circles enabled faculty to share a breadth of counsel, from tips about the local community, such as dog-walkers and hairstylists, to recommended approaches to academic recruitment and hiring.

Academic Context: Purpose and Relationships

Despite collectively performing a breadth of experiments, faculty participants sometimes struggled to reconcile positive leadership principles with the academic context. Notably, such comments were offered as constructive criticism, in a spirit of earnestness and out of an apparent desire to deploy positive leadership principles effectively. While a few respondents considered positive leadership to be universally applicable to organizations of all kinds, others like Simon observed that "the examples we were given were more business-related than academic" and underscored the differences between corporations and universities. A sense of limited executive authority in academia was the differentiator they emphasized the most, embedded in discussions of purpose and relationships.

To some extent, faculty wrestled with the applicability of purpose-finding in an academic context. Derek explained, "It's quite common in business that you can get everyone to pull towards one goal . . . . But there is very little common purpose in a university department." Helen, too, noted that "with faculty the goals can often be highly individualized" and leadership often involves "helping people progress on their own pathways." While there were occasions of faculty leaders successfully listening for and affirming others' distinct goals, the connection of individual purpose-finding with collective purposes appeared to be more elusive. Even Teresa, who indicated that her department had a shared mission, expressed, "I really liked the life purpose [activity], but that feels harder for me to disseminate in the department." For engineers, whose professional competencies and identities often rest on problem-solving, purpose-finding may have presented a particularly difficult rethinking exercise.

A few of the faculty leaders were somewhat perplexed, too, by the challenges of pursuing high-quality connections and positive energizers in academia. Ian explained, "I have no control over who I have to work with. Some are energizers and high-quality connections, and some aren't. I can't neglect the people who aren't the energizers—sometimes they need a lot of help." Lisa conveyed a similar sense of restriction when it came to personnel and peers: "Unlike corporations, these are the people you have to work with. You can't hand-pick . . . . We can't hire and fire them away." Conversely, some faculty participants reported success in elevating

positive energizers in their departments. Olivia and Jim, for instance, indicated that it was relatively easy to identify positive energizers in their departments and intend to leverage their influence. Moreover, faculty participants' repeated appreciation for interactions with colleagues in the Positive Leadership trainings suggests that they themselves were benefiting from the principle of high-quality connections in an academic environment.

Academic Context: Cynicism and Authenticity

Several faculty emphasized cynicism as a distinctive characteristic of academia and an obstacle to positive leadership. Rose confessed that, if she had heard about positive leadership prior to her engagement in the training sessions, "I probably would have rolled my eyes. I may have been an incredible skeptic, and thought, 'These people are suckers.'" Yet faculty respondents valued the ways that their peers appeared to transcend the pessimism and distrust so typical of academia. As Charles put it, "Engineers are in general a pretty cynical crew, and leaders can be even more so. I was gratified to see that there was an evolution and understanding of the value of the [positive leadership training] activity." In fact, Rose herself went on to become one of the strongest proponents of positive leadership principles in the College, often seeking the counsel of a College leadership development coach in designing and reflecting on her own positive leadership experiments.

Perhaps because of the prevalence of cynicism in academia, a subset of faculty participants had qualms about achieving authenticity in their practices of positive leadership. Ian worried that engaging in positive leadership experiments with colleagues would "seem fake or inauthentic" and possibly "change or harm the relationships I have with people." Paige acknowledged that she "resented the experiment part a bit" because it "seemed a little fake" and "my people would see through that." While these sentiments may reflect an admirable desire for relational integrity and derive from the inherent discomfort of personal growth, they may also spring from the imposter phenomenon that persists in academia—the fear of being discovered as a fraud despite indisputable evidence of sufficient training and achievement, especially in environments that reward perfectionism [15].

At the same time, fears about inauthenticity did not appear insurmountable. Paige and Ian, both quoted above, nonetheless incorporated positive leadership principles into their practices. Teresa found it best to be forthright about her posture as a learner: to "be willing to be a bit vulnerable and tell people that you are trying something." Erica advised, "Start small and do what feels the most natural . . . . The things that I know I can practice without feeling like I'm bending myself into a pretzel are the best for me to tackle." Such concerns about genuineness may hint at a belief in an innate capacity for positive leadership, which research suggests is vastly outweighed by intentionality [16]. The faculty members' desires for authenticity may also speak to the importance of constructing one's positive leadership in alignment with the core self, as well as the ongoing need for support in actualizing new knowledge.

Value and Institutionalization

Even as some faculty grappled with practicing positive leadership principles in academia, their assessments of the training program were markedly positive, with words like "well-done" and even "fantastic" surfacing. Some participants, like Helen, recognized the training as an exceptional opportunity: "This program felt like a really incredible investment in me from the college, and it's the type of thing that is probably pretty normal for leaders in industry to get, and something I've never seen anywhere else in an academic setting." In a similar vein, Derek noted, "I'm impressed that this happened . . . . I'm 100% all in on the College doing this." Faculty responses in the end-of-program assessment similarly indicated the program's impact. In the quantitative section of the assessment, participants most frequently identified the following benefits of the training program: gaining closer connections with colleagues, sharing positive developments more frequently, and approaching leadership work with more intentionality. (See Appendix D.)

For several faculty participants, the executive-level college leaders' endorsement of and direct participation in the Michigan Engineering Positive Leadership Program were particularly impactful. Paige observed that "commitment from [the former dean], from higher leadership, was really important for the success of the program," enabling group cohesion and heightening participants' motivation. For Warren, the messages from College leaders about the value of the Positive Leadership Program were themselves examples of positive leadership. Perhaps most memorable was Olivia's perspective: "This was my introduction to the [College] leadership philosophy . . . . I thought, 'I want to work somewhere where they think about leadership this way. I made the right choice coming here.'" In essence, the provision of the Positive Leadership training was perceived as a manifestation of positive institutional culture–and demonstrated power as a recruiting and a retention tool as well.

At the same time, faculty's emphasis on a shared language around positive leadership pointed toward the potential for broader cultural change in the College. When contrasting their understandings of positive leadership before and after the training program, faculty repeatedly stated that they now had a "proper vocabulary" for positive leadership principles–which, in several cases, was a welcomed affirmation and reinforcement of their pre-existing values and practices. Others, such as Helen, professed to gain a new intellectual framework for thinking about leadership: "For me it became a cognitive heuristic, a rubric for making leadership decisions." Even though Arthur had received extensive leadership training from other organizations prior to his time in academia, he highlighted the benefit of having leadership concepts "packaged holistically" through the Positive Leadership Program in the College. Charles particularly stressed the value of a shared language of positive leadership: "Having the positive leadership [training] armed everyone to have a language to work through issues as they arise . . . . We can share a common set of ideas that we've worked through together."

Faculty's interest in continuing and enlarging the Michigan Engineering Positive Leadership Program further signals their value of this learning opportunity. When invited to share any closing thoughts in his retrospective interview, Ian recommended offering the training more broadly, saying, "We could have these ideas permeate [the College], which would help set the context for implementing these things . . . . There would be a common understanding." Others suggested expanding the leadership program to newly promoted faculty members, research scientists, all staff, or as Helen put it, "across the board and at every level." Both Greg and Arthur envisioned a subsequent positive leadership training program that would unite previously trained College leaders with new trainees, and Greg imagined a distinctive college-wide ethos that would attract the broader university community: "You'd love to see that other people [on campus] recognize a difference in the behavior of people from the College —that they think, 'There's something about that group that I can't put my finger on, that is astonishingly good.'"

Happily, there are signs that institutionalization of positive leadership is happening in the College. During or following the one-year training, at least two of the participants brought in leadership development staff to impart positive leadership principles to their departments or delivered presentations themselves. One of the distinctive characteristics of this Positive Leadership Program is its availability not only to faculty leaders, but also to high-level staff members, culminating in integrated faculty/staff sessions. Although this paper centers on the experiences of faculty participants, our work opens the door for future examinations of leadership development strategies for blended faculty/staff groups in engineering colleges.

Implementation Recommendations

As we contemplate future iterations of the Michigan Engineering Positive Leadership Program, as well as adaptations of this program in other institutional contexts, the following "lessons learned" come to mind:

Executive-Level Sponsorship: The endorsement and purposeful participation of the dean was essential to the program's success, motivating others to engage intentionally as well. While the language of "mandatory" was not used, the dean requested that participants communicate with him if they were unable to participate in the training sessions. In addition, one of three questions in the annual budget process required unit leaders to flesh out strategic plans for implementing positive leadership principles in their work, which conveyed the high priority that the executive leadership team placed upon the positive leadership endeavor.

Experiment-Reflection Approach: The lived experiences of departmental chairs can be intense, frenetic, and politically complex, reducing collegial interactions to transactions and crowding out opportunities for reflection on leadership practices. Faculty developers must create the time and space for faculty to reflect on positive leadership experiments in order for transformation to occur. Learners cannot be intentional when these margins don't exist.

Cohort Learning: As the faculty participants' remarks indicate, they greatly enjoyed learning together. Cohort learning creates a context for peer coaching, where participants can gain deeper insights as they verbalize their own experiences and listen to those of others. In the case of our program, the faculty participants entered with a relatively strong history and foundation of collaboration, mutual respect, and trust. A group coming together for the very first time would require more social cohesion groundwork to benefit fully from cohort learning.

Partnership with Outside Consultant: In this program, the partnership between an external positive leadership consultant and a trusted in-house expert proved invaluable. While the external partner leaned on scholarly, evidence-based content to enhance instructional credibility, the Director of Leadership Development translated business concepts for the engineering academic context and brought "insider" knowledge of the College's climate and norms. Their collaborative design of the training program enabled strategic customization and delivery.

Differentiated Instruction: Faculty developers should maximize opportunities for individualizing training. This program was designed to be self-paced, with pre-work released ahead of time so that faculty participants could watch videos and review core concepts on their own schedules, in chunks or all at once. Faculty also valued elements of the training that allowed quiet processing time. Future iterations of the Positive Leadership Program will likely build in even more options and resources, such as a centralized website with all course content.

Faculty and Staff: Integrating faculty and staff members is desirable but should be accomplished strategically. Early in our program development process, some faculty expressed worry that they could not speak vulnerably about leadership challenges in front of staff members, especially from their own units. To maximize psychological safety, we operated the faculty and staff training separately until the end of the year. Going forward, we hope to reduce rankism by integrating these groups from the outset–while still creating spaces for role-specific reflection.

Conclusion

Being intentional around cultivating Positive Leadership concepts and shared language through cohort learning is an effective approach to faculty leadership development, demonstrating potential to transform conventional academic cultures of deficit, judgment, and cynicism. The Michigan Engineering Positive Leader Program revealed the importance of creating opportunities for engineering leaders to practice, reflect, and share experiences so they are empowered to engage in culture change, whether they are recovering from the challenges of the pandemic or moving toward other institutional goals. The promotion of positive leadership continues in Michigan Engineering with the expansion of targeted trainee groups and purposeful integration of principles into all of the leadership development programs and practices.

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Appendix A - Glossary of Positive Leadership Terminology

Abundance Gaps: "the difference between normal, acceptable performance and extraordinary or 'positively deviant' performance" [17]

Fundamental State of Leadership: "a psychological state, a temporary pattern of thoughts and feelings in which we are (1) purpose-centered (the results we want are not weighed down by needless expectations); (2) internally directed (our personal values guide our actions); (3) other-focused (we feel empathy for the feelings and needs of others); and (4) externally open (we believe that we can improve at whatever it is we are trying to do)" [18]

Generalized Reciprocity: doing something benevolent without expecting anything immediately from the other person, but instead trusting that the same person or someone else will later return the favor [19]

Gratitude: the quality of being thankful; readiness to show appreciation for and to return kindness, which creates a self-perpetuating virtuous cycle [20]

High-Quality Connections: interactions that enhance individual flourishing and organizational effectiveness, including heightened energy and greater capacity for action, evidenced in a sense of mutuality and positive regard [6], [10]

Positive Deviance: exceptional, outstanding, and even virtuous performance [20]

Positive Energizers: people who stimulate vitality in others, motivating and inspiring them [6]

Purpose Finding: finding the overlap between what you love, what you are good at, what the world needs, and what the world will pay for [18]

Positive Leadership: leadership practices that center on what elevates humans and organizations, what is life-giving and good, and what is extraordinary and inspiring [20]

Appendix B - Reflection Questions

What principle did you apply through a new leadership behavior or practice?
Why did you try that?
What did you expect?
What happened?
What did you learn?
To what extent did the experiment take you out of your comfort zone and into your growth zone?
What will you repeat or do differently next time?

Appendix C - Examples of Experiments

Abundance Gaps:
“One office that I work with has struggled a lot; management issues and issues due to the pandemic have been very hard on them. Struggles on many fronts. In talking with the director, I tried to think about the abundance gaps. Instead of just focusing on problems, we’d tried to talk about what is the ideal state, what would take us to an excellent condition for that office—not just trying to manage bad things that happened. I think it was helpful, taught me some about how she and the office perceive their state of excellence. Helpful exercise for me.”

Generalized Reciprocity:
“A dept had an administrator on leave so we offered one of our staff to help out. We see this as a contribution to the college and have had some gratitude shown in return.”

A colleague asked for help, gathering some names of HR staff that could assist them in training a new hire administrator and, “ I received several names and followed up with them and I was given more support than I could have imagined! There is now training and ongoing mentoring set up for my new hire with senior staff from other CoE departments. These resources have always been there for me, I just never thought to reach out for help. Until now!”

Gratitude:
“Each staff member will receive a small stack of paper, a jar, and a tag with an explanation to write down positive things that happen each day [accomplished goals, positive comments from others, surprises, moments, things that just genuinely make them happy) and put it in the jar.” They opened it at the quarter's end and read all the positives, encouraging individuals to help fill the gratitude jars of others by expressing gratitude toward the person.

High-Quality Connections:
“I hand-delivered a verbal expression of gratitude and a desk calendar [4 in total); so they could enjoy a smile every day of the year, not just when I was there to remind them of the value they bring. I will make an effort to connect with them periodically [at least every 2 months) to continue to strengthen the relationships. This is a stretch for me because my time is thin and so is theirs, and check-ins often feel like social time vs. leadership time. I need to reframe that in my brain and remind myself that I'm not being an ‘energy vampire.’"

Positive Energizers:
An administrator asked that colleagues send a short email with the names of 2- 3 people that they work with regularly and feel energized by. “I've already received a list of 5 or 6 people, and I hope to get more. My leadership team has been working on a new mission statement, and I hope to collaborate with the "positive energizers" to gather their feedback and buy-in for the roll-out of the new mission statement since they are likely to be people who can positively influence their peers.”

“I identified two colleagues as positive energizers [for me), and so asked if we could get together. One suggested lunch, so we have gotten together once a month [twice so far and we are getting January on the books) to get out of our offices, eat, and chat.”

Appendix D - End-of-Program Quantitative Results

Table 1.0 Program Evaluation

Question	Likert Scale Average (1-Strongly disagree, 3-Neutral, 5-Strongly agree	Value Range
I intentionally ran experiments in my work based on what I learned	3.8	Neutral to Agree
My experiment reflections helped me to improve as a leader	3.8	Neutral to Agree
I am noticing more positive things that are happening in the organization	3.9	Neutral to Agree
I am more deliberate with how I approach my work	4.1	Agree
I am sharing more positive things that are happening in the organization	4.1	Agree
I feel more connected to my colleagues	4.2	Agree

Appendix E - Interview Protocol

Interview Protocol: Positive Leadership Study, Michigan Engineering HUM00246963

Thank you for being part of the inaugural Positive Leadership Training Program in Michigan Engineering during 2022-2023. As you know, we're interested in learning more about faculty members' experiences in this program, as well as possible experiments that they have conducted as a result. To help you remember the key content from the training sessions, we have supplied the Engineering Positive Leadership Toolkit and Positive Leader Content Summary, both previously distributed to all program participants.

Key components of the Positive Leadership training included: fundamental state of leadership, abundance gaps, positive emotions, gratitude, purpose finding, generalized reciprocity, contribution, positive energizers, and high-quality connections.

Foundational Thoughts

What do the words "positive leader" or "positive leadership" mean to you?

What did you understand about positive leadership before the training sessions, if anything, and how did your understanding develop or evolve? Consider ways that your understandings were affirmed or challenged.

Course Content and Resources

What positive leadership concepts were the most connected and applicable to your own leadership role, the Michigan Engineering context, and/or academia more broadly? Why?

What positive leadership concepts seemed less connected and less applicable to your own leadership role, the Michigan Engineering context, or academia more broadly? Why?

How many times have you looked through any parts of the Positive Leadership Toolkit or Content Summary over the last year?

Experiments

What was the most impactful experiment that you conducted, based on what you learned during the program? What did you try, and what were the results? What would you do differently next time?

What is something that you would like to experiment with in the future, based on our course content?

What advice would you give to a Michigan Engineering leader who wanted to incorporate Positive Leadership principles in their leadership role?

If you didn't engage in an experiment, what were the barriers to doing so?

Evaluation of Training Sessions

What did you especially appreciate about the Positive Leadership training sessions?

What do you wish had been different about the Positive Leadership training sessions, or what would have made those gatherings more effective?

Closing

If you could prioritize one way that you'd like to see Michigan Engineering leaders incorporate Positive Leadership principles, what would that be?

If you could see one Positive Leadership principle emerge more strongly in your own life, what would it be, and what would you hope for?

Please share any further thoughts about your experience in the Positive Leadership Program.