

THE LEADERSHIP LABORATORY:

A leadership practice field involving peer mentors in a first-year, project-based class

Abstract

Scholars of leadership education have recently called for more “practice fields” that combine leadership experience with deliberate instruction, reflection, and feedback. The value of experience and reflection toward leadership development is widely espoused; yet, few studies assess best practices for their integration within leadership education. Through an assessment of a curricular-based peer mentor program, this article offers a potential model for a successful leadership practice field. Based on an analysis of student feedback, several features of the program are noted for their correlation with leadership learning and developmental gains.

Introduction

Over the last two decades, cultivating students’ capacity for future leadership has become central to the mission of higher education, resulting in a proliferation of leadership development opportunities both in and out of the classroom (Haber, 2011; Osteen & Coburn, 2012; Rosch & Schwartz, 2009). Peer leadership programs have become especially popular, given their perceived efficacy for developing leadership skills. Several multi-institutional studies utilizing self-reported data have shown that peer leadership opportunities can improve students’ communication, organization, and collaboration skills, as well as their sense of leadership efficacy and ability to promote a common purpose (Dugan & Komives, 2007; Keup, 2010; Kezar & Moriarty, 2000). Despite these trends, Allen and Shehane (2016) note a continued lack of “practice fields” in leadership education where students are given the “opportunity for real-time feedback, coaching, and repetition” (p. 44). They argue

for “a balanced approach to leadership education” that involves both experiential and conceptual learning, highlighting “the necessity for experience in almost any domain of learning” (pp. 35, 44). Indeed, the domain of leadership learning seems particularly apt for contextualization and reinforcement through direct experience, especially if the goal is to prepare students for future leadership experience. Jenkins and Allen (2017) similarly stress that “the vast majority of curricular and co-curricular leadership education is focused on conceptual understanding and personal growth activities”; still lacking are the kind of leadership “practice field[s]” that allow students to “put knowledge into action” (pp. 53, 54).

Leadership practice fields that successfully unite experience with instruction, reflection, and feedback may already exist among the array of peer leadership programs across the higher education landscape. And such an array could prove advantageous to scholarship on leadership education. As Rosch and

Schwartz (2009) suggest, this context has “opened up new and exciting avenues to explore best practices for leadership education”; however, they also assert that the existent scholarship on leadership education has not yet capitalized on these new avenues and the variety of practices they might contain, such that it remains unclear what kinds of experiences and educational practices contribute most significantly to leadership learning (p. 178).

Purpose of the Study

This case study assesses a model for a leadership practice field, which developed out of an initial mission to provide peer mentorship to teams of first-year students in a project-based learning course. The goal of this study, ultimately, is to add to the conversation of best practices for leadership education by drawing connections between salient pedagogical features of the program, the targeted learning outcomes and competencies for the peer mentors involved, and feedback from these peer mentors on their experiences and perceived gains. Shaped by its curricular context and mission, the program’s most notable features include a strong emphasis on self-directed learning within a team leadership context; incorporation of standardized leadership competency language; a weekly cycle of deliberate instruction, direct leadership experience, and structured reflection; and opportunities for various forms of feedback. Thus, the program bears the hallmarks of a leadership practice field as outlined by Allen and Shehane (2016) and Jenkins and Allen (2017). In 2017, an assessment was conducted using quantitative and qualitative self-report measures. The guiding research questions are as follows:

1. As a result of participating in a peer mentor program that combines conceptual and reflective learning strategies with leadership experience in a project-team setting, what gains do

students perceive in their leadership learning outcomes and competency development?

2. How do students make sense of their development within this program? That is, what connections do they articulate between the salient program features and their developmental gains?
3. Based on the analysis of the quantitative and qualitative data, what best practices might be gleaned by leadership educators for the cultivation of effective leadership practice fields?

Review of Scholarship

The recent call by Allen and Shehane (2016) and Jenkins and Allen (2017) for more leadership practice fields draws on common thinking within the field of leadership development. Pervading recent scholarship is the notion that the best way to cultivate leadership skills is through a combination of meaningful experience and purposeful reflection. As Haber (2011) suggests, “Experiences that actively engage the students, such as hands-on activities, real-life scenarios or situations, service-learning projects, particularly when coupled with intentional reflection activities, can allow for greater meaning-making” (p. 73). Scholars of leadership development often frame the coupling of experience and reflection within recent discussions of high impact practices or experiential learning theory (Densten & Gray, 2001; Guthrie & Jones, 2012; Jenkins & Allen, 2017; Priest & Clegorne, 2015; Shook & Keup, 2012). Experiential learning – as espoused by educational luminaries John Dewey and David Kolb – is a cyclical learning process of experience and purposeful reflection. According to Kolb (1984), it is an “idealized learning cycle” that involves direct experience, reflection, conceptualization, and experimentation “in a

“recursive process that is sensitive to the learning situation and what is being learned” (p. 51).

While clear in theory, the creation of leadership development programming that merges experience, reflection, conceptualization, and experimentation seems more challenging in practice. As Guthrie and Jones (2012) suggest, “Traditional definitions of out-of-classroom learning have focused on developing leadership skills only through participation in student organizations and interaction with offices and professionals focused on cocurricular involvement,” and they go on to argue that “mere participation by itself does not take full advantage of what students can learn about leadership” (p. 53). Without the structure and time in the classroom, it may prove difficult to provide student leaders with the kinds of conceptualization and reflection that maximize learning.

Inside the leadership classroom, the opposite appears to be true: conceptualization and reflection dominate, while direct experience and purposeful experimentation prove difficult to come by. Jenkins (2012) found that discussions and reflection activities were the most common instructional strategies in the leadership classroom, while experiential skill-building opportunities where students could practice leadership behaviors and group processing were the least common. This is in spite of the fact that, in another study, students reported a preference for these kinds of leadership activities (Allen & Hartman, 2009). Furthermore, most of the experiential learning activities utilized in the leadership classroom, as reported in the studies conducted by Allen and Hartman (2009) and Jenkins (2012), were not direct leadership experiences with real consequences but role-playing, simulations, or games.

Peer teaching – the only skill-building activity that involved students in a leadership activity with real consequence – was the sixth least used out of 24 instructional strategies listed in Jenkins’ 2012 study (pp. 50-54). Though less common, peer teaching and peer mentoring programs have potential as leadership practice fields that merge instruction,

experience, and reflection in a recursive cycle of learning. Less studied than larger, campus-wide leadership development programs, peer mentor roles have received some attention by scholars over the last decade (Colvin & Ashman, 2010; Ender & Newton, 2010; Haber, 2011; Harmon, 2006; Johnson, 2009; North-Samardzic & Cohen, 2016; Walters & Kanak, 2016). According to this scholarship, peer mentors have opportunities to develop leadership skills related to communication, organization and planning, and helping others through identification of their needs. Harmon (2006) perhaps does the most to connect the features of a peer mentor role and learning outcomes, though this study also exemplifies a limitation in this nascent body of scholarship. In most of these studies, the mentor’s role – as a guide for individual students or as a kind of teaching assistant – does not appear to support development in key leadership competencies related to group development, teamwork and collaboration, and guiding groups toward shared goals. Questions remain as to whether a peer mentor role is able to promote a more complete array of leadership practices and competencies, such as those identified by prominent leadership development models.

Program Overview

The Honors Mentor Program (HMP) at Purdue University was developed in response to a curricular need for peer education and leadership. All first-year students in the Honors College enroll in a project-based learning course that is designed to develop collaboration, critical thinking, integrative learning, and research skills. The course meets twice a week over the first eight weeks of the fall semester, with one class serving as a seminar-style lecture and the other as a recitation or “ideas lab.” In the latter, groups of seven work on projects that build on course concepts. These groups stay the same throughout the course and are assigned a peer mentor who guides them through the completion of the course projects. In this role, mentors coach students on their collaboration, research, and critical thinking skills; they facilitate group bonding and promote

an inclusive team culture; and, more generally, they mentor first-year students through the transition to college life.

Along with their experience as team leaders in the first-year course, the program provides mentors a concurrent weekly course of their own, entitled HONR 299: Honors Mentors. Each of the ten or so faculty teaching a first-year course also teach an Honors Mentors course comprised of the nine peer mentors assigned to their students. A set of common instructional strategies is employed within this curriculum. These strategies are as follows:

1. Leadership Competencies & Strengths: peer mentors are provided a list of 14 leadership competencies with descriptions of each. They are asked to identify the competencies in which they have the most confidence (their strengths) and are encouraged to focus on developing those competencies further in their peer mentor roles.
2. Leadership Concepts & Application: mentors are provided readings, handouts, and structured activities on leadership concepts that are most relevant to their leadership context and that align with the progress of their team's development. For instance, the concepts stressed during the first two weeks include stages of group development, trust and group norms, diversity and inclusion, and practices for promoting psychological safety. Over the next couple weeks, mentors continue to engage these initial concepts but also explore interpersonal communication in a peer-leader context as well as accountability and personal responsibility. Over the last half of the class, as mentors become more familiar with their teams and as those teams begin to gear up for final projects, the instructional focus shifts to problem solving and planning,

systems thinking, different styles of leadership (e.g. pushing vs. pulling), and empowerment. In class, mentors explore these concepts, with emphasis on how to apply this knowledge toward the improvement of their teams, toward the empowerment of individual team members, and toward the cultivation of their own leadership skills.

3. Individual Reflection: regular reflections are assigned as part of the course. Reflection prompts encourage mentors to assess the development of their team and their leadership skills as well as to establish developmental goals and strategies for the week ahead. Mentors are instructed to incorporate the concepts and competencies they have learned in class and to consider how their leadership experience has further advanced or contextualized their learning.
4. Peer Feedback: mentors are given twenty minutes or more in each class to share their experiences and receive feedback from their peers and faculty.
5. Midpoint Feedback: halfway through the course, mentors meet individually with faculty to receive more extensive feedback and to revisit their personal development goals.
6. Reconceiving Leadership: in the final reflection for the course, mentors are asked to outline their definition of leadership, to articulate their leadership style, and to consider the next steps they might take in their leadership development moving forward.

These instructional strategies are meant to foster a self-directed mode of learning, putting mentors in a position to maximize their own leadership learning

as they engage in a recursive cycle of deliberate instruction, meaningful experience, structured reflection, and purposeful experimentation.

Leadership Learning Outcomes and Competencies

Akin to the context-based or mission-based approach suggested by Osteen and Coburn (2012) and Piatt and Woodruff (2016), the curriculum of the HMP was designed with a focus on the leadership skills, concepts, and strategies that mentors would need to excel in their roles. Learning outcomes were selected based on key practices that peer mentors would need to enact in order to lead a project team in this curricular context. While not strictly derived from any one model, the leadership practices framed by these learning outcomes do align with core leadership behaviors highlighted in other prominent models. The first four learning outcomes all correlate with key practices or features of the Relational Leadership, Social Change, and Leadership Challenge models, useful summaries of which can be found in Haber (2011) as well as Rosch and Anthony (2012): (1) articulating goals and objectives to others; (2) leading a team toward shared goals; (3) promoting a strong team culture; and (4) empowering others by promoting their teamwork and leadership skills. The last learning outcome of (5) employing techniques for self-development correlates with the emphasis placed on self-awareness and continuous self-development in the Social Change and Emotional Intelligence models (Haber, 2011).

A related set of leadership competencies was identified to help peer mentors articulate and analyze the skills necessary to enact the leadership practices outlined above. Jenkins and Allen (2017) recognize the combined use of learning outcomes and competencies as an integral component of leadership education design (p. 45; Seemiller, 2016, p. 52). Croft and Seemiller (2017) similarly outline how key leadership practices are each “comprised of a multitude of individual competencies” (p. 11). In other words, the competencies provide a more

pixelated view of the skills and knowledge at stake in leadership behaviors. Based on relevance to the peer mentors’ roles and learning outcomes, 14 competencies were selected from a list of 20 that the Purdue University Leadership and Professional Development Initiative (LPDI) had in turn selected from the larger list developed by Corey Seemiller (2013). According to Croft and Seemiller (2017), this list was created from “an analysis of components of three contemporary leadership models, content from the 2006 CAS Standards and ACPA and NASPA’s 2004 Learning Reconsidered document, as well as nearly 18,000 learning outcomes embedded into the accreditation manuals of all 522 accredited academic programs in U.S. higher education” (p. 11). Croft and Seemiller go on to emphasize that utilizing leadership competencies can provide greater theoretical rigor to leadership education, greater ability to measure leadership development, and greater connectivity with other leadership roles across campus, especially if similar competency language is being used. Thus the HMP leadership competency list was based on the framework and language offered by LPDI. The list of competencies utilized for the HMP in 2017 include the following:

- Teamwork & Collaboration: “understanding the importance teamwork has for the effectiveness of groups”; “using that understanding to foster a culture of helping others and collaboration.”
- Listening & Observing: “hearing what is being said and observing nonverbal cues to prevent miscommunication, promote understanding, and demonstrate a sense of caring”.
- Group Development: “understanding how groups develop”; anticipating and responding to “behaviors of a group and the people in it”; fostering group development to enhance effectiveness.
- Continuous Learning: committing to expansion and improvement of

skills and knowledge by “adopting continuous learning strategies”.

- Reflection & Analytical Reasoning: learning from past successes and failures; “understanding the context of the situation from multiple perspectives”; being open-minded when considering possible solutions.
- Self-Understanding: ability to understand one’s own “beliefs, values, culture, actions, personality, strengths, and weaknesses”.
- Decision Making & Problem Solving: defining a problem and potential causes; specifying a preferred outcome; employing critical and creative thinking skills to find and implement solutions.
- Personal Responsibility: accepting ownership for achieving desired outcomes or not meeting expectations; receiving feedback from others and considering it “in order to develop competencies and effectiveness”.
- Cultural Intelligence & Inclusion: “understanding how diverse perspectives, backgrounds, cultures [. . .] can influence groups”; ability to “foster an environment in which people feel welcomed, valued, [and] free to share their viewpoints.”
- Verbal Communication: using speech to share information with others “in a clear, concise, and persuasive manner”.
- Summarizing & Distilling Information: “selecting, and sorting, combining information”; conveying distilled information in a coherent manner.
- Systems Thinking & Planning: assessing a system or network by examining its parts; considering how decisions impact a network or system;

systematically identifying tasks and setting deadlines to achieve goals.

- Ethics: understanding standards for “personal and professional ethical behavior”; acting in accordance with a set of social norms, beliefs, values.
- Written Communication: “using written formats to share information with others in a clear, concise, and persuasive manner.” (Leadership and Professional Development Initiative, n.d.)

Method of Evaluation

In 2017, an assessment was conducted on students’ leadership learning based on participation in the Honors Mentor Program. The post-assessment survey was completed by 70 of the 87 students (80%) who participated in the 2017 program. 14 of the respondents had three years of experience in the program, 21 had two years of experience, and 35 had one year of experience.

The assessment consisted of two indirect tools used to corroborate the leadership development observed by faculty. The first tool was a post-assessment survey that asked program participants to self-report their perceived attainment of the learning outcomes and their perceived gains in the leadership competencies. Indirect self-evaluation measures have been documented as a common and reasonably effective method for assessing student leadership learning and competency development, though they do have their limitations (Goertzen, 2009; Roberts & Bailey, 2016; Seemiller, 2016). Using a five-point Likert scale of agreement, participants were asked to self-report whether they were now better able to perform the leadership practices framed within the learning outcomes. For the second part of the quantitative post-assessment, participants were asked to rate their gains in the 14 leadership competencies due to their involvement in the 2017 program, using a five-point scale of extent: excellent, very good, moderate, minor, and none.

The purpose of this first tool was to draw general conclusions in regard to guiding research question #1: what gains do students perceive in their leadership learning outcomes and competency development as a result of participating in the HMP? Efforts were made to diminish some of the self-report biases identified by Rosch and Schwartz (2009). The post-assessment was anonymous so as to diminish social desirability bias or Hollywood effect; it was also conducted five weeks after the program's completion in order to diminish any honeymoon effect.

To further supplement the data gained from the post-assessment, a second tool was administered consisting of three focus group sessions. As suggested by Goertzen (2009) and Roberts and Bailey (2016), focus groups pose several advantages over quantitative approaches and can add deeper and richer information to an assessment. The focus groups involved 19 students overall: seven mentors who had one year of experience and 12 who had multiple years. A CITI certified student researcher conducted the focus groups, recorded and transcribed the responses, and scrubbed the data of personally identifiable information. Peer mentors were asked about their general takeaways from the program and how their experience may have differed from other leadership contexts on campus. They were also asked

to elaborate on the gains they made in the program toward their leadership competencies and were encouraged to identify program features that helped facilitate those gains. The questions were designed to address guiding research question #2: how do peer mentors understand their developmental gains in relation to the salient features of the program?

Results of Quantitative Measures

In their responses, peer mentors agreed at a high level that they were better able to perform the leadership practices framed by the learning outcomes. The mean score for each of the learning outcomes can be seen in Table 1. This data was not tested for statistical significance. Still, it is clear that the strong majority of program participants agreed to some extent that they were better able to enact the core leadership practices identified as a result of their participation in the HMP. Ability to identify techniques for self-improvement that can be used in other leadership settings received the lowest mean score by a small margin, and this score might have been impacted by the fact that only 82% of the post-assessment respondents reported having other leadership roles on campus.

Table 1.
Self-Reported Agreement with Attainment of Learning Outcomes.

Leadership Learning Outcomes Statement	Mean (SD)	Strongly Agree	Strongly or Somewhat Agree
I am now better able to promote a strong team culture.	4.29 (.64)	38.57%	90.00%
I am now better able to lead a team toward shared goals.	4.28 (.58)	34.29%	92.86%
I am now better able to articulate the goals and objectives of a project, course, and/or program to others.	4.26 (.71)	40.00%	87.14%
I am now better able to improve the teamwork and leadership skills of others.	4.20 (.69)	35.71%	84.29%
I am now better able to identify techniques for self-improvement that I can apply to other leadership settings.	4.19 (.71)	37.14%	82.86%

The self-report survey documented in Table 2 also shows that peer mentors were confident in the extent of gains they made in the associated leadership competencies due to their participation in the 2017 HMP. Over 80% of respondents felt they had made moderate or better gains in 12 of the 14 competencies. Furthermore, the distribution of scores appears to align closely with the leadership behaviors essential to their mentor roles, emphasized in the course instruction, and framed by the core leadership learning outcomes identified for the program. The leadership learning outcomes of developing a strong team culture and promoting teamwork and leadership skills in others were selected given the team-based context for leadership and the instructional focus placed on teamwork and group development. Thus, it is reasonable that teamwork & collaboration (4.10) and group development (3.87) would have two of the

highest mean scores. The program curriculum also places a strong emphasis on students performing (and recognizing the value of) self-directed learning strategies, strategies that involve other highly rated competencies such as continuous learning (3.80), reflection and analytic thinking (3.65), and self-understanding (3.64). Conversely, the competency areas with the lowest mean scores – ethics (3.14) and written communication (2.99) – are more obtusely involved in the leadership role and receive less explicit attention within the curriculum. In short, the distribution of scores for self-reported gains across the 14 competencies appears to align with the leadership experiences, curriculum, and learning outcomes, which may be taken as an indication of their validity.

Table 2.
Self-Reported Extent of Gains in Leadership Competencies

Leadership Competencies	Mean (SD)	Excellent (5) or Very Good (4)	Excellent (5), Very Good (4), or Moderate (3)
Teamwork & Collaboration	4.10 (.87)	79%	94%
Listening & Observing	3.90 (.92)	69%	94%
Group Development	3.87 (.89)	67%	93%
Continuous Learning	3.80 (.92)	66%	90%
Reflection & Analytical Reasoning	3.65 (.92)	63%	89%
Self-Understanding	3.64 (.79)	59%	93%
Decision Making & Problem Solving	3.57 (.90)	54%	87%
Personal Responsibility	3.55 (.89)	60%	84%
Cultural Intelligence & Inclusion	3.54 (.97)	59%	83%
Verbal Communication	3.51 (.84)	49%	90%
Summarizing & Distilling Information	3.42 (.86)	46%	87%
Systems Thinking & Planning	3.35 (.93)	46%	81%
Ethics	3.14 (1.07)	39%	69%
Written Communication.	2.99 (1.01)	33%	60%

Results of Qualitative Measures

Analysis of the focus group data provides further insight into how the distinguishing features of the program facilitated the developmental gains reported by students. Participants saw significant differences between their experience in the HMP and other leadership experiences. These distinguishing features were strongly correlated to their developmental gains. Five themes emerged in this data, consisting of correlations between competency gains and key programmatic features.

Theme One: The Competency of Continuous Learning, and Related Competencies of Reflection & Analytic Thinking and Personal Responsibility. This theme connects closely with the leadership learning outcome of acquiring techniques for self-improvement and involves several highly rated competency areas. Peer mentors strongly emphasized in the focus groups their awareness of the techniques for self-improvement at stake in the program as well as how those techniques supported their leadership learning.

Continuous Learning. One mentor provided an apt description of the HMP learning strategies related to continuous learning in terms reminiscent of experiential learning theory and leadership practice fields:

So something that I've always talked about with the program and one of the biggest advantages is the ability to learn and do in a constant cycle. When you go to your mentor meeting and you're talking about different styles of leadership and different strategies. You then turn around, the next week, and apply it. Then you get a period to reflect, refine, and reiterate, the same leadership style or a different way to do it. In so many leadership positions, you know we go off to conferences and retreats . . . and it's like you learn all this stuff about leadership and then you take your club position or your team captainship. Then you do it for a semester or a year and

those are so broken up, but in the Mentor Program the quick turnaround between those two things keeps it a constant cycle of learning and practicing and reflecting, and learning and practicing and reflecting. And that to me is the way it is able to build those leadership skills and everything. (1.2)

In the focus groups, 14 of the 19 participants explicitly identified features about the HMP that distinguished it from other leadership opportunities they had, with many of those involving the weekly cycle of conceptualization, experience, reflection, and experimentation. In response to the mentor above, another claimed:

The opportunity to take very specific feedback and each week apply some sort of very specific goal, to test a new idea or see how some sort of strategy worked that was suggested to you by your faculty mentor or some other mentors in your group, how that actually plays out. I think that's a really interesting thing that happens in the Honors Mentor Program that might not happen necessarily in other programs. (1.3)

Here, the mentor emphasizes how the cycle of the leadership role and course provides a context in which students can experiment with different leadership concepts and strategies, as though in a kind of leadership laboratory.

Aspects of the the experience, reflection, conceptualization, and experimentation cycle were noted in the other two focus groups as well. One mentor in the second group identified how this cycle allowed them "to set a specific leadership goal every week" and to see "how that affects my students" (2.2). In the third focus group, one mentor even defines leadership in terms of the continuous learning strategies offered by the program:

I mean leadership is about how you execute certain ideas but it's also about learning from others to see what would

work better for people you're trying to lead. So I think that's one thing that I learned but also going back and thinking about how this specific recitation went and then thinking about things that I could do differently next time to improve the outcome. (3.6)

In all three focus groups, opportunities for receiving feedback and reflection were identified by participants as significant drivers of their leadership learning.

Personal Responsibility. Central to the competency of personal responsibility is taking ownership of one's own development and being willing to receive and utilize feedback. The HMP provides mentors ample opportunities for feedback from faculty as well as other mentors. Receiving feedback was identified by 13 of the 19 participants as an important source for learning new leadership strategies or thinking more critically about their skill development, with eight of those stressing feedback from faculty (1.4, 1.5, 2.2, 2.3, 2.4, 3.1, 3.5, 3.4). In several instances, participants identified how feedback from faculty beneficially challenged their self-understanding, with one noting that "at first it was hard to deal with the things that were said. But later on I was able to use that opportunity to grow so like that really helps" (1.5). Eight of the 13 who mentioned feedback identified how other mentors influenced their leadership (1.4, 2.3, 2.6, 3.3, 3.2, 3.7, 3.1, 3.6). One commented: "the peer relationships with other mentors really help you kind of assess . . . how you're developing as well and kind of feeding off of them to develop your own skills" (2.6). Another acknowledged their initial skepticism about feedback before claiming that their experience in the program "has taught me that you can improve soft skills like leadership through external input. It's not necessarily 100 percent experience" (3.2).

Reflective and Analytic Thinking. Eight of the 19 participants specifically identified reflection behaviors that led to gains in leadership skills or understanding (1.2, 1.4, 2.2, 2.5, 3.1, 3.4, 3.5, 3.6, 3.7). One claimed that before participating in the HMP, "I had never been in a situation where I really am asked

to think about and talk about my skill development. And so I thought it was really valuable that we had reflections where we wrote about what we were doing and how our skill development was going" (2.5). Mentors frequently emphasized their reflections as being goal-oriented and several acknowledged how reflection transformed a tendency to be self-critical into a more "purposeful" form of "developing your skills" (3.7; 3.4, 3.3, 3.1).

Theme Two: The Competency of Group Development. The competency of group development proved another significant theme, which closely aligns with the leadership learning outcome of fostering a strong team culture. Within the focus group comments, mentors stressed the value of learning leadership concepts in class regarding group norms and team formation and applying them to the experience of developing a team, which proved essential to their gains in this competency area. Several mentors noted that the projects provided a mixture of structure and room for agency that they found beneficial. In contrast to an experience working on engineering teams, one mentor explained that in the Honors College first-year curriculum,

there is no right answer. You're leading this group, you have those structural checkpoints that you're going to hit, but you're leading this group on a completely unique journey that no other group in that class will ever go on ever again. So it is kind of more challenging because it is more open ended. I think the challenge comes from [the group] being different and that's what is beneficial about that experience. (1.2)

Another mentor explained that, unlike with their experience as a TA, the peer mentors in the HMP have "an opportunity to kind of be on your own while still being under the faculty . . . , you are not only answering [the first-year students'] questions but you also lead them" (3.6). While the faculty do provide structure through the projects, their instruction, and their feedback, mentors are ultimately given the

responsibility of leading and developing the team of first-year students.

To help mentors think critically about how to build their teams, the curriculum explores group development stages and stresses the role of group norms and psychological safety. Mentors initially encounter the latter two concepts through Charles Duhigg's "What Google Learned from Its Quest to Build the Perfect Team" (2010). This reading was referenced in the focus groups over a dozen times (other course readings were mentioned only two other times). Based on this reading and their work with their project groups, mentors claimed:

- I think that was a good lesson to know that you can actively set those group norms and control the group dynamics in a positive way. (1.3)
- For me it was really important to create a good group dynamic and group norms and through that Google reading they talk about vulnerability being an important component to group work and trust. And so every week we started out with sharing something about ourselves. And I felt like that created bonds between them and then they could play off their strengths naturally because they knew each other. (2.2)
- I really tried to focus on the team that was doing the task and not the task itself. Because I really think that a team that actually wants to work together and enjoys working with each other does more and accomplishes more than teams that just focus on the task. (2.6)

When asked what they learned about collaboration and teamwork through the HMP, 12 of the 19 focus group participants specifically referenced the importance of establishing group norms and a healthy culture predicated on trust and psychological comfort. Several mentors described using

teambuilding activities (2.2, 2.3, 1.4, 1.6, 3.1). Mentors also emphasized how their application of leadership concepts from Duhigg (2010) allowed them to address problems at different stages in the team's development, with one claiming: "I had to really look deep within the group and see what wasn't working and why it wasn't working and how we could remedy that" (2.1, 2.6). According to the mentor, the remedy was to develop more trust through group norms and teambuilding exercises.

In learning about group development, another feature of the HMP is implicated: its duration. While only eight weeks, the mentors' time with their teams is longer than what they experience in leadership roles at retreats or orientations and proves sufficient time for team bonds to form and for mentors to see how their efforts influence the team and individual growth. As one mentor observed: "it's very rewarding to see their growth throughout the eight weeks and how they even take on those leadership skills" (3.3). Given this context, mentors have sufficient opportunity and time to exercise their group development competency and to achieve the learning outcomes of developing a strong team culture as well as promoting teamwork and leadership skills in others.

Theme Three: The Competency of Teamwork & Collaboration, and Related Competencies of Systems Thinking and Cultural Intelligence & Inclusion. Closely related to the above theme on group development, another theme emerged regarding the competency of teamwork & collaboration, along with related competencies of systems thinking and cultural intelligence & inclusion. These competencies and the discussion around them aligned with the learning outcomes for leading a team toward shared goals as well as promoting teamwork and leadership in others. As one mentor put it, "I think the project based nature [of the leadership context] definitely makes it easier to set clear goals" – a sentiment that was echoed by others (1.1; 2.2). As above, the combination of the project structure and the variable team dynamic was regarded as a beneficial context: the goal of completing the project was clear, allowing mentors to focus their attention on how best to lead

their team toward that goal.

Teamwork & Collaboration. According to the focus group participants, a beneficial feature of their role was that they do not take part in the project itself. Several mentors identified this aspect in contrast to their experience with student organizations (1.6, 2.2, 2.6 3.4, 3.7). “You yourself are not doing the project,” noted one mentor, “you help facilitate them to work together” (1.6). A mentor in the third focus group offered a similar take, noting how their learning has influenced their own teamwork skills:

I think the thing I learned the most is just how groups work . . . [As a mentor], I’m kind of like outside of the group while I’m being a part of it. And I think it’s interesting because I think I work differently now in groups. (3.4).

Instead of being consumed by the task itself, mentors are able to focus their attention on shaping the culture and collaboration behaviors of the group. It is clear that the mentors see this as a productive vantage point from which to learn about how teams work.

Systems Thinking. When describing what they learned about teamwork in the focus groups, mentors often described their teams as complex systems of individuals. A shared sentiment was that “teams operate very differently and people [on those teams] have different strengths” (3.3). Another mentor claimed that “one of the most important things that I learned was how to assess strengths and weaknesses . . . , seeing how they all had their strengths and weaknesses and how those interacted” (1.3). Others emphasized the need to learn about individual team members – including what makes them comfortable and what motivates them – so as to improve the team’s effectiveness (3.2, 3.7, 3.5). Relatedly, mentors identified learning how to use the talents and behaviors of individuals to alter aspects of the group process, such as enlisting dominant team members to spend less time on their own ideas and more time encouraging others (3.5, 1.3, 1.2, 1.4). Mentors also described learning how to manage

group processes by strategically dividing the group into smaller components (2.6, 3.3). One mentor described having such success with this last strategy that they “tried it again with another organization I’m in with a team that functions a bit different than the one that I’ve mentored and it worked out very well” (3.3).

Cultural Intelligence & Inclusion. In learning about how teams work, mentors also had opportunities to cultivate their cultural intelligence and inclusion competency. All the teams had diversity in terms of student majors and regional backgrounds, nearly all had gender diversity, and most had some racial or ethnic diversity. Several mentors noted that the projects for the first-year courses provided opportunities to observe how diversity can shape the intellectual content of a group’s work (1.6, 2.6, 2.3, 3.1, 3.7, 2.1), with four of the six emphasizing cultural diversity. One mentor observed how a particular project “just showed how every person in the team brought something different through their diversity” (2.3). Another facet of their experience with diverse groups was how the differences between team members factored into the group development. Whether they had a “really diverse group” in terms of ethnicity or simply a group with “differences in their personalities,” mentors acknowledged the need for an individualistic approach to team leadership as well as the added importance of establishing group norms to create a psychologically safe environment (2.2, 2.5, 2.4, 3.6, 3.3, 3.4, 3.2). In some cases, mentors made strong efforts to ask about group members’ lives so as to “make sure that they hear each other talk about their backgrounds,” which then fostered team bonding (2.5). In other situations, mentors described creating psychologically safe environments and ensuring equitable turn taking in team discussions, which then led to ethnic minorities becoming more involved in the group and more willing to “share their cultural differences” (2.2, 3.2).

Theme Four: Competencies of Communication, Planning, and Problem Solving. In their efforts to develop a strong team culture and to lead a team toward shared goals, mentors identified in the

focus groups a strong reliance on communication competencies and on planning and problem-solving competencies that also stressed communication skills.

Communication. One of the strongest connections made by mentors between their experience as team leaders and their communication competencies was the importance of an individualized approach. Several mentors described realizing the importance of personalizing their communication strategies when speaking with different team members, as well as “develop[ing] different styles of communication” and thus “different ways to reach them” (2.6; 3.7, 3.6, 3.2, 3.3). Beyond tailoring their messages to individual students, other mentors acknowledged the need to use a variety of communication strategies depending on the team (1.3, 1.2).

Another communication competency that mentors stressed was their ability to listen and observe, which was enhanced by their experience of working with groups in recitation. Freed from doing the work themselves, mentors spent a good deal of their time observing the behaviors of their teams. Already noted above was the care that several mentors put into observing strengths and weaknesses as well as other qualities of their team members. When asked what they gained in terms of the communication skills, a couple mentors described making a deliberate effort to work on their observation and listening competency or their non-verbal communication competency while working with their teams (1.4, 3.3).

Problem Solving. “I could see their problems, but they couldn’t,” explained one mentor (1.1), which evinces how the role of mentors outside the group encouraged a deliberate use of their listening and observing competency and put them in a position to hone their problem solving competency. Mentors described a number of different problems that could arise in each team’s unique journey, and all of them required communication competencies in order to be resolved. Beyond the above-mentioned efforts to communicate with individuals to correct or improve

group development and processing, several mentors noted how having to “call out” first-year students for problematic behavior forced them to work on their communication skills (1.5, 2.4, 3.1, 3.4, 3.5).

Planning. Mentors also drew connections between communication and planning. One mentor observed that strong communication across a 50 minute class period required “a surprising level of planning” (1.2). This same mentor and several others noted that their planning efforts involved developing good questions, recognizing how much time certain discussions would need, and generally managing the group conversation to make it more efficient (2.1, 2.2, 2.4, 2.5). As one mentor observed: “I learned a lot about communicating the right kinds and the right amount of information . . . I didn’t want to say too much or reveal a concept and just give it to them. I wanted to make sure they could work through it on their own” (2.5). Such a strategic approach to communication requires careful thought and planning, it also requires mentors to be adept at summarizing and distilling information offered from faculty (as noted by participants 2.1, 2.2, 3.6) in order to communicate that information successfully to their teams.

Theme Five: Competency of Self-Understanding. The final theme stands as a cumulative effect of those outlined above. By exercising their competencies through their peer leadership experience – combined with the repetition of instruction, reflection, and feedback – mentors described having a better understanding of their own leadership and how to utilize their unique competency strengths to lead teams. As evident in several of the quotations above, mentors see the HMP as a kind of leadership laboratory, through which they can test different strategies, discover their areas of strength, and cultivate a “leadership style” that works for them. One mentor explained:

I think the main thing that I have gained from the program is just an awareness of my own leadership style. Before I was a mentor, I knew how to lead but I didn’t know what techniques I was using or how I was actually needed. And by having to

work with the first-years, I realized that leadership actually doesn't really have a set formula to it, but there are mechanics involved that you can identify and then improve upon. (3.7)

This student identified important gains in their leadership knowledge and understanding, despite having a good deal of prior confidence in their leadership abilities. On the other hand, many students come into the program without feeling like natural leaders, though they, too, make similar gains in discovering the leadership techniques that work for them:

For me it was kind of cool to learn how I can use my skills for leadership because I'm a quiet person I don't see myself as really having that typical skill set where I can effectively lead. And this class really taught me how to use my skills so that I could effectively lead my students. (2.4)

This student would go on to describe their style as "leading from the back." Seven of the 19 focus group participants made explicit comments about how their experience in the HMP helped them identify a leadership style that worked for them (1.1, 1.4, 2.4, 2.6, 3.6, 1.2, 3.7). Several of them noted the program's emphasis on identifying and developing competencies of strength rather than areas of weakness. One described realizing through the program "the kind of way that I would be a leader" and being able to "play to my own strengths to help lead my mentees," a sentiment that was echoed by others (1.1; 1.4).

Reflection & Recommendations for Best Practices

The quantitative and qualitative data from the assessment provides evidence that peer mentoring within a project-based learning context, coupled with the instruction of fundamental leadership concepts and regular opportunities for reflection and feedback, proves an effective means for promoting

core leadership practices and related competencies. Based on the assessment, several key features of the HMP curriculum could be regarded as best practices for leadership practice fields and might be adopted by other leadership educators:

1. Perhaps the most notable feature was utilizing a project-based learning class for first-year students as a leadership context. In this context, peer mentors have a unique opportunity to learn key leadership concepts and behaviors, like cultivating a strong team culture, promoting effective collaboration and teamwork, leading teams to shared goals, and empowering individual team members through personal coaching and encouragement.
2. The weekly cycle of leadership experience in the first-year classroom along with conceptual instruction, reflective activities, and regular feedback in the mentor classroom proved a strong catalyst for leadership learning and development. This cycle created a context where mentors could deliberately experiment with different leadership concepts and strategies and where they could ultimately cultivate a leadership approach suited to their strengths and personality. It is clear that peer mentors found the class time devoted to discussion with other mentors quite valuable, as it improved their ability to identify leadership strategies that worked for them and the groups they led.
3. The emphasis placed on self-directed development, the standardized competency language, and the reflective learning strategies appear to have helped peer mentors derive further meaning from their experience, particularly in terms of self-understanding.

Replicating this kind of leadership practice field poses a major challenge: namely, creating an underlying context that provides students with meaningful leadership experience. To truly replicate such a leadership practice field would require educators to identify or even create a real need for peer leadership within a curricular context, one that places students in a situation where they can experiment with leadership behaviors, can apply new leadership concepts, and can regularly observe how their behaviors and strategies impact the people they are leading. The easier step is developing a concurrent leadership course that focuses on the concepts, behaviors, and competencies most relevant to the leadership context and provides students with regular opportunities for reflection and feedback. While challenging to replicate, such a context allows educators to use conceptual, experiential, and reflective learning strategies in ways that reinforce each other and that ultimately maximize leadership learning.

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