

LEARNING FROM LEADERSHIP CAPSTONE PROJECTS

Abstract

Using a qualitative grounded theory approach, student guided leadership capstone projects were examined using a thematic analysis to determine the categories of projects students chose. The research sought to answer two research questions: 1) What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor? 2) What can this tell us about the program from an evaluation perspective? The analysis found four categories: self-care, application and understanding of leadership, interpersonal skills, and intercultural development skills. The implications for leadership educators are discussed as well as how capstone projects can be utilized in other leadership programs.

Introduction

After five years of teaching a capstone leadership course and using the same student driven capstone project, the instructors of the course started noticing trends in the kinds of projects the students chose. These discussions trended towards some agreement on the categories of projects students decided to pursue. At one point, the authors asked what a qualitative research approach would reveal about these categories and topics students chose. We asked ourselves, what can we learn from capstone projects in leadership programs? What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor? What can this tell us about the program from an

evaluation perspective? The purpose of this work is to examine the capstone leadership projects from a four-year leadership minor. Leadership programs across the world are becoming more prevalent due to the perceived need for leadership capacity in increasingly turbulent times (Hotho & Dowling, 2010). Higher education has responded to this need by offering academic and co-curricular leadership programs for students (Schwartz et al., 1998). Additionally, literature supports the need to support students transitioning from higher education to career (Anderson et al., 2012). Given the breadth and depth of current leadership programs, instructors at a four-year leadership program in a large research university in the Midwest region of the United States began an experiment with a senior

year capstone project called the individual leadership education and development (iLEAD) project. This assignment allowed students to choose their own capstone project depending on their interests after having (nearly) completed a multi-year academic minor in leadership studies, and the project was framed in such a way that students were asked to focus on topics they felt they needed to further explore as part of their leadership learning. Over several years of assigning the iLEAD project, the instructors began asking what senior-level students were saying they still needed in terms of leadership education and development after going through a four-year leadership minor involving both curricular and co-curricular components. This broad research question became more specific over time and developed into the examination outlined in this study regarding the topics chosen for these projects. Through an examination of these project topics, we aim to explore how leadership education programs can assess potential gaps in leadership education curricula by tuning into student-driven learning experiences.

The iLEAD project is a semester-long project through which students identify what they want to work on in terms of their leadership development. As the instructors gained experience in administering the assignment, the projects appeared to fall into several common categories. Anecdotally, these categories included (a) working to be less introverted, whether through gaining more confidence or by practicing extraversion; (b) learning to listen empathically; (c) practicing self-care; (d) delegating/stepping down from a role; (e) leading or engaging with community-based projects (e.g. service learning, community engagement, etc.); and (f) examining a specific leadership concept such as personality types or motivation. For this study, we examined these projects to better understand what elements of leadership learning students sought through this project. We also offer a preliminary look at using capstone projects to assess gaps in leadership programs as a form of program evaluation (Shaeiwitz, 2002). Capstone projects offer a unique way to assess and evaluate a program. They typically give students an opportunity to demonstrate comprehensive knowledge in a given area (leadership in this case) and capstone projects have been used as the basis for curriculum modifications at other academic institutions (Shaeiwitz, 2002). Thus, our research questions are as follows:

1. What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor?
2. How can leadership educators and program administrators assess potential gaps in curricula by using capstone projects as another source of program evaluation?

Pedagogical Framework

The iLEAD project is a student-directed project. Students complete a series of self-reflective activities within and outside of class to identify an aspect of their leadership that they would like to develop. The role of the instructor is to assist and provide guidance throughout this process. Ultimately, the student determines the direction of the project and in what areas of leadership development they wish to engage. The instructor then works with students individually to find an avenue through which to enact their project. These avenues could include organizations with which the student is already involved, such as a campus organization, a place of employment, or a sorority or fraternity. Alternatively, the project could involve a club the student wishes to join or even friends and family members. Offering students the choice and autonomy in selecting the topic, managing and assessing their learning activities, and determining the timing and location of those activities aligns with the concept of self-directed learning (Knowles, 1975). Self-directed learning gives students the initiative and responsibility for their own learning. This project embodies that model.

Self-directed learning connects to the concept of exercising leadership when an authority figure is not directing a follower. When authority figures are not present or are not directing followers, it is up to those followers to exercise leadership to achieve organizational and personal goals (Ferrazzi & Weyrich, 2020; Heifetz et al., 2009). The iLEAD project gives students an opportunity to practice this kind of leadership by following a self-directed learning model with the focus and intention of furthering the students' leadership education and development goals as determined by the students themselves. Self-directed learning is an important skill for students today, and students need opportunities to direct their own learning

and create their own assignments, learning environments, and forms of feedback and assessment to create lasting and meaningful learning (Rashid & Asghar, 2016). These kinds of activities are also important in creating intrinsic motivation for students, which results in an overall stronger performance and greater success during their collegiate experience. With greater control over their own learning, students are better able to critically assess information, reflect on their learning, and assess their own performance (Douglass & Morris, 2014).

Baxter Magolda (2008) defines self-authorship as an “internal capacity to define one’s beliefs, identity, and social relations” (p. 269). Self-authorship is a transition for a person from having values, beliefs, and identities imposed on them from the outside to redefining those things for their self. The iLEAD assignment is, in essence, asking students to make this transition and create a project which gives them the freedom to determine both what they need to complete their leadership education and how they will do so. Leadership educators can utilize self-authorship as a theoretical building block where students can examine their own beliefs about leadership, their identity as leaders, and how leadership works in practice with others. Indeed, this framework reflects the leadership program in this research.

Baxter Magolda (2008) outlined three primary elements of self-authorship, which mirror the journey upon which we hope our students will embark through this iLEAD project. First, it is important for students to trust the internal voice by having enough self-knowledge and self-awareness to determine when to do something. The iLEAD project brings a sense of urgency to students’ goals because it is within the parameters of an assignment for a one-semester course, though students determine what exactly they will do. In this way, they determine the significance of their interests and prioritize developmental goals that they see as important to their next steps. The second element is building an internal foundation, which is accomplished by solidifying one’s identity internally and acknowledging strengths and weaknesses. In the context of the iLEAD project this would be reflected in one’s leadership identity (Komives et al., 2006) and the student’s strengths and weaknesses as a leader. The self-reflective nature of the iLEAD assignment engages students in a process of honest self-discovery that moves beyond simple

awareness to action-oriented behavior. Students understand their strengths and areas for growth, and they use this awareness to chart a path forward through this assignment. Finally, securing internal commitments occurs when the first two elements come together to promote wisdom about oneself. As students learn more about their positive and challenging experiences in the past and present, they develop the confidence necessary to effectively address issues that will arise in the future.

Initial and Informal Data Analysis

Over the course of four semesters, instructors collectively reviewed and graded 263 iLEAD projects. These projects spanned across 13 class sections of 15-20 students each. This sample represents all the sections and projects over the four semesters. Students were a mix of junior and senior undergraduate students. Specific demographics were not recorded. Examples of past projects include: developing empathic listening skills through scheduled coaching sessions; participating in a local Toastmasters club; developing self-care habits such as mindfulness and meditation; writing a guidebook for the next generation of club leaders; teaching strengths-based leadership to coworkers; and examining a work group’s personality differences and how to leverage those differences. One student used the project to practice his speech for a non-profit he was starting, as well as to help launch the non-profit. Another student served as a leader of a student organization and made it her goal to know every one of her approximately 80 members’ names and something about each of them. The projects have had varying levels of investment by the students, but most instructors were generally pleased with the projects and student investment in their projects at both the beginning and end of the semester. Anecdotal evidence from conversations with instructors suggested seven initial categories (Table 1).

Table 1

Initial Categories

Initial Category	Example or Description
Introversion projects	Students who self-identified as introverts often wanted to be more extraverted. This was expressed through comments such as, “I wish I spoke out more in class” or “I wish I was more comfortable stating my opinion.”
Listening projects	Perhaps the opposite of introversion projects, these were projects where students expressed a desire to listen more and/or to listen with more empathy (e.g. listening to understand versus listening to respond).
Self-care projects	Many students were experiencing burn out, mental health issues, or just life issues that they had been neglecting but which needed to be addressed. These students intentionally created room to take better care of themselves. These projects included activities such as yoga, meditation, and counseling.
Delegating/stepping down projects	Some students were involved in extra-curricular activities and had leadership positions in those groups. Students that chose these types of projects often self-identified as controlling or over-involved. Therefore, they used the project to experiment with delegating or helping with succession planning.
Community involvement projects	Some students were interested in serving their community and used the project to either join an existing organization or lead the charge on an issue facing their community.
Next steps for career projects	Some students wished to focus on doing something that would help them prepare for their first job out of college or graduate school. These projects included joining and participating in a career-related organization or finding and engaging with a mentor in their field.
Specific content projects	During their time in the leadership studies minor, many students connected with one or two content areas and wished to learn more about that area. Examples included teaching strengths or personality differences to colleagues and figuring out how to leverage those strengths or differences.

Note. This table outlines anecdotal initial categories that emerged from discussion with instructors of the senior seminar course in which the iLEAD project was assigned.

Research Design

Students in a capstone leadership course participated in a semester-long project in which they identified an area to further develop their personal leadership skills and abilities. The purpose of this grounded theory study was to examine what areas of development these students identified and engaged in and how this can inform curriculum design that better prepares students for the next step in life. Grounded theory is a theoretical framework that is used as an inductive strategy to data analysis (Charmaz, 1996). Using a grounded theory approach to the iLEAD project, researchers gathered, organized, and then analyzed large amounts of student-generated qualitative data related to their final project for their leadership minor. Researchers took note of codes and categories which emerged and then mid-level themes from this inductive process and not from a pre-established hypothesis. Researchers continued to refine their data analysis process by engaging in co-construction of meaning together to “develop their ideas and intuitions about the data” (Charmaz, p. 26, 1996). Our approach to grounded theory involved organizing data through thematic analysis, which Braun and Clarke (2012) described as “a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set” (p. 57). Through this type of analysis, researchers are able to make sense of the common ways participants experience and understand phenomena. With this framework, we sought to answer our primary research question: What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor? This design will also inform our secondary research question around how leadership educators and program administrators can assess potential gaps in curricula by using capstone projects as another source of program evaluation.

Data Collection. Data for the study came from student projects in a senior level leadership course. The course was the capstone in a four-year leadership program that is primarily academic, but also includes co-curricular components. The project, called the iLEAD project, asked students to think about their own leadership education and development. They reflected on questions, such as what would be essential to their

leadership development and learning as they complete a leadership program, or what would be necessary for their continued growth and development as they transition from college to career or graduate school. Students were asked to think about these questions and come up with what they wanted to do for their project and what they wanted to work on for their own leadership learning and development. Students were encouraged to be honest and vulnerable in deciding the direction of their projects and were steered away from “safe” or “fluffy” projects that entailed little engagement from the student. The parameters of the project were deliberately broad to encourage student creativity, and students were allowed to choose their own project and determine what work was necessary to develop their own leadership skills. Data were collected from 13 sections of the capstone course from 2016 to 2018, and 263 projects were collected and analyzed. The assignment asked students either to write an outline of their proposed project or to write a contract with their instructor outlining their project. These outlines and contracts were collected from the 13 sections.

Data Analysis. Each of the researchers separately analyzed the projects of 263 participants to identify primary areas of development that students focused on in their capstone. This process involved examining students’ espoused purpose of the project, the outline of the actual work in which the student engaged throughout the semester, and student reflections following completion of the project. With this holistic analysis of the project design and implementation, we used descriptive coding to describe the purpose of each project. After this initial round of descriptive coding, we each used pattern coding, which is a method of searching for relationships between codes to identify emergent themes (Saldaña, 2021). As with the initial analysis, this second round of coding was done separately so that we each identified potential categories and emergent themes through our individual analyses of the data.

The separate process of initial data analysis was a form of researcher triangulation, which enhances the credibility and trustworthiness of qualitative research (Shenton, 2004; Merriam, 1998). After performing separate individual coding analysis, the researchers brought their separate analyses together to discuss

emerging categories. Over the course of two meetings, the researchers compared our interpretations and determined patterns supported by data analysis across the three researchers. Ultimately, we found no major discrepancies in researcher interpretations of the data. While in some places we organized the data patterns differently, there was a general consensus regarding overarching themes. As a result, we were able to fine-tune these through our discussions by expanding some thematic groupings and consolidating others. This process allowed us to ensure that our findings accurately reflected the gaps in leadership learning and development as depicted in students' capstone projects.

Findings

Students, instructors, and administrators alike have much to learn from capstone projects. By examining capstone projects for students enrolled in a four-year leadership studies minor at a large research university in the Midwest region of the United States, the researchers set out to qualitatively address the research question: What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor? The purpose of the iLEAD project was to mirror how leadership is exercised when there is no authority. Students are asked to self-assess and self-direct their own leadership development. The other research question asked: What can this tell us about the leadership program from an evaluation perspective?

We identified four primary areas of leadership learning with which students engaged through their iLEAD assignments: self-care, application and understanding of leadership, interpersonal skills, and intercultural development skills. The four categories that emerged from the descriptive and pattern coding differed from the initial anecdotal categories. However, those initial categories could easily fall under the four broad categories that emerged from the analysis. There were projects that did not fit into any of these categories, but there were not enough of those other projects to support a new category. Based on these categories, we can see that students finishing a four-year leadership program that involves both curricular and co-curricular activities self-select leadership activities around self-care, understanding and applying leadership, interpersonal skills, and intercultural skill development.

Self-care was the most popular topic with our students. The broad category of self-care had several sub-categories: mental, physical, emotional, financial, and spiritual health; healthy boundaries; self-confidence focused on building the concept of self (e.g. becoming more assertive, speaking out more, and sharing thoughts and opinions); and gratitude focused on being happier and developing a full sense of self. Projects included following meditation and mindfulness routines, exercise and diet routines and journaling, adjusting financial habits, and projects that focused on building self-confidence (e.g. running for an elected position that the student had only been thinking about). One student wrote, "I would like to be more committed to getting help and talking to people when I'm struggling." Another student wrote, "My leadership development goal for this semester is to shift my focus away from the priority of others and put priority on myself. ...I realize that I need to really focus on myself... ...Find new ways to manage stress along with exercising each week." Another example of a self-care project, "My goal is to take care of myself more... ...goal to center around self-care." While the category was broad, the focus of these projects centered on making time to connect with personal needs as a way of caring for oneself.

Application of leadership and understanding of leadership was also a popular, albeit broad, category. Many students were interested in developing their knowledge and expertise around particular leadership topics and content such as CliftonStrengths, personality types, motivation sources, and leadership theories and perspectives. This category also included projects where students actively exercised leadership by working in their community through volunteering, doing service projects, or coordinating events. Other examples and sub-categories included: College to career, professional development, connecting to community partners, leadership development, leadership efficacy, coaching and mentoring projects focused on leadership development, community related projects, community support, non-profit work, event planning, how values impact leadership, time management/organizational skills, and identity based projects. For example one student wrote, "My leadership goal for myself this semester is to be more willing to put time into being a leader, attitude wise. I would use adaptive leadership and servant leadership." Another student completed and reflected on several personality assessments such as Strengths, Myers-Briggs, and the Big 5 writing, "I would

like to better understand and love myself as a leader in order to prepare myself for my future career.” In another project within this category, a student explained, “By the end of the semester I will have read StrengthsQuest and Strengths Based Leadership, then implement what I have learned in my supervisor position at work, and finally reflect on what I have learned about others and myself by focusing on strengths.” Student projects within this category represented a wide spectrum of approaches to understanding and exercising leadership.

Interpersonal skills are an important part of exercising leadership and being an effective leader and many students self-identified that they needed to further develop their interpersonal skills. Project examples include joining clubs to work on those skills and attributes, going for an elected position in an organization, and mentoring younger members of an organization. For example, one student wrote, “I want to make a genuine effort to really connect with those around me; within this semester I hope to form a new, deep, and transparent relationship at work with...” Another student wrote that they wanted to, “Engage and build more personal friendships and relationships. I picked this goal because I didn’t realize how apparent it was that I’m not strong at forming one-to-one relationships.” Interpersonal skills seem to be the kind of skills one develops over the course of their life. No leadership program with a time boundary would ever develop these skills to a person’s capacity. This does reflect some self-awareness from the students who chose projects in this category and indirectly highlights a goal of the leadership program overall (developing a sense of self-knowledge and awareness). In another project focused on interpersonal skills the student focused on “Developing deeper relationships... learn what vulnerability can be instead of fearing it. Go beyond myself and learn how to trust others.” Other examples and sub-categories included: Self-confidence projects focused on skill building such as public speaking, communication focused projects, and coaching projects focused interpersonal listening.

Intercultural skills as a category was the least popular of the four categories among students. The leadership program has an intercultural development course as part of the minor. These projects tended to focus on continuing any personal progress made in that course and sometimes restarting that process. Some students wanted to learn about other religions or racial identities

and others wanted to engage in work that fostered more inclusion in their community and some students focused on developing their inclusive leadership skills. One student focused on learning about Bennett’s model of intercultural sensitivity and Boas’s anthropological theory of cultural relativism saying, “I would like to become a more inclusive, empathetic leader and seek to understand why others believe what they do, even if those beliefs are different from mine.” Another student said, “I want to improve my ability to engage in tough conversations with those around me, specifically involving the growing need for attention to social justice.” Other examples and sub-categories included: Going outside one’s comfort zone related to diversity and inclusion, engaging with a campus or community group doing diversity and inclusion work, being more accepting of others, developing more self-awareness from an intercultural context, focus on self and developing skills related to inclusion, and decreasing judgment of difference.

Taken together this research highlights several important themes for leadership classes and programs – addressing the second research question. The project examples and student quotes show how the projects led to the categories. The first theme is that all leadership programs potentially have gaps and assuming gaps exist, students will see those gaps. There are many perspectives and areas in the field of leadership and it would be difficult for any single program to cover them all. The second is that many students struggle and self-care is an important topic that schools and universities and communities should address comprehensively. Giving time and space for students to work on their own mental health and self-care is time well spent. Third, a self-directed and self-authored project gives students an excellent opportunity to exercise leadership without authority. It also provides time and space for students to think critically about their own leadership development while developing important leadership skills like critical reflection and assessing their own performance.

Instructor Reflection

One of the researchers also taught the capstone course. This researcher’s reflections from teaching the class,

working with students on their projects, and working on this research project are below.

My reflections in class and experiences with students as they worked on these projects include success stories and failures, both from students and myself. Over the years I experimented with the project by making the instructions more and more specific and then letting the instructions be ambiguous and broad. I wanted the assignment to reflect our program's perspective on leadership – that leadership can come from anywhere and anyone, often you have to make your own decisions about what needs to be done, and you often have to figure out for yourself what you need to work on. I used coaching extensively to help students figure out what they could do for their projects. Once I started to see students picking similar projects in different classes, sections, and semesters I developed some categories of projects on my own. The instructors of this class had conversations about these categories and there was some agreement and disagreement about the categories chosen and what that meant. For myself, I noticed, in hindsight, that I may have manifested some of the categories by mentioning them to students, e.g. that self-care was a popular project for students. I did try to give a wide variety of examples when students asked for examples, but it is possible I may have inadvertently steered them to those categories I believed existed. Over time I have seen some amazing projects and students make great breakthroughs in their learning and development. I have also seen students treat this project like just another thing to do or task to complete with little learning or development as a result. The categories that emerged in our work feel like a better representation of the projects than the initial and anecdotal categories. The objectivity and expertise of the two other researchers brought a welcomed perspective on this research.

Discussion & Implications

This research started with a few broad questions. What can we learn from capstone projects in leadership programs? What areas of leadership development do students seek out through capstone projects for a four-year leadership studies minor? What can this tell us

about the program from an evaluation perspective? This research explored these questions from a qualitative perspective and discovered four broad categories of student capstone projects. One of the major findings was that students select self-care projects more than other projects. The research around the mental health of college students is quite clear (i.e. students are suffering and need help). Good mental health is important for leaders and for exercising leadership. The capstone project offered students a way to make progress on the aspect of well-being most relevant to them. The popularity of this category speaks to a larger issue of well-being and mental health in college and beyond as well as raising questions beyond the scope of this work. Students today are overworked, over-involved, stressed, and anxious (Oswalt, et al., 2018; Pedrelli, et al., 2014). Mental health issues have been and continue to be on the rise among adolescents and young adults (Twenge et al., 2019). For the leadership program, student health is very important and if our students need help we want to help them. This project offered an opportunity for students to address an important side of their lives, without which, they probably cannot effectively exercise leadership. Leaders' mental health and work-life balance have direct and indirect effects on their leadership behaviors and effectiveness. Leaders with better mental health and more balance in their lives exhibit more positive leadership behaviors and are more effective (Barling & Cloutier, 2017). Work-life balance is important and giving students an opportunity to develop skills to better achieve that balance seems important and relevant. Leaders also need good mental health in order to show empathy, to be perceptive of followers' needs, and to keep showing up to do their jobs (Brearley, 2019).

The next two categories were application and understanding of leadership and interpersonal skills. Some leadership concepts and theories are taught in the minor and some students returned to those concepts to further their learning and application of those concepts. Other students sought to practice exercising leadership through community work or campus organizations. These projects reflect students' desire to be more effective and knowledgeable leaders and to continue their journey of lifelong leadership development. These two categories and the projects within them are not surprising and reflect a general desire to continue the leadership education and development the minor offers in its courses and programs.

Interpersonal skills and intercultural skills are important topics for any leadership program. The program highlighted in this study spends significant time and effort fostering development on these two areas in all the courses, and one of the courses specifically covers intercultural development for a semester. However, it makes sense that some students will need and want more learning and development on these topics given that everyone's learning and development in any course or mix of courses is different. Both skills are also complex and difficult to make progress on or master depending on the person and their personality and experiences.

The last category was intercultural skills. The minor and program intentionally promote and teach intercultural skills. As mentioned above, there is an entire course within the minor centered on this topic. Therefore, it makes sense that some students might not feel the need to revisit these concepts. It is also possible that students did not like the course that focuses on these concepts or they were not comfortable exploring those topics and for those reasons did not want to revisit them. That some students still select these projects indicates both some self-awareness about where they need to grow and develop as well as a gap in the program. Other interpretations may be that students in the leadership minor who are coming predominantly from a white racial frame and other dominant cultural perspectives may have compartmentalized intercultural skills as a mere checking off of a proverbial diversity box after having completing the previous course. Since intercultural skills have not historically been incorporated consistently into the leadership minor as a whole, students may not feel the urgency or justification to make it a part of their leadership practice. This could indicate that intercultural skills should be taught more intentionally throughout the minor/program. Recently this program has been attempting to include social justice and inclusion elements throughout the program. That work continues.

This research also highlights a potentially informative way to bring student voices to program evaluation. Student voices in program evaluation are both important and informative (Maldonado-Franzen, 2020). The use of student voices is an important component in program redesign and improvement (Pauffer et al., 2020). Through the iLEAD assignment, students highlighted gaps in our curriculum and programming. Students were invited to deeply explore topics that contributed to their

leadership learning, and therefore the focus of their project could simply reflect interests. However, instructors were intentional in designing this project as an opportunity to cultivate self-guided leadership learning and to explore the limitations and boundaries of our current programmatic offerings. As such, the assignment specifically asked students to reflect on what they were still needing as they approached the end of their time in the leadership program. While the project topics certainly reflect students' interests, the strategic framing of the assignment also surfaces gaps in the program and therefore has the potential to serve as a powerful source of program evaluation. We could do more around student well-being and mental health. We could focus more on building interpersonal skills and providing more depth on certain leadership concepts. We could also do more to incorporate social justice and inclusion elements throughout the minor and program. This research revealed some specific gaps in our program, and these types of capstone projects could be used by other leadership programs to evaluate their specific curriculum and program gaps. This method of program evaluation takes student voices into consideration as well as giving those students time and space to fill the gaps in their own learning and development in a manner most relevant to them.

This research suggests that this particular leadership program does have some gaps in its curriculum and programming that could be addressed. Although this was not a formal program evaluation project, the iLEAD assignment suggests gaps around student well-being, various leadership concepts, interpersonal skills, and intercultural skills. Projects similar to the iLEAD assignment could be implemented by other institutions as a way to identify and address these gaps. This type of project also promotes the concept of self-authorship which seems to be important for students to develop as they transition from college to career or graduate school.

This kind of student driven critical program reflection is important for leadership programs by providing student feedback on the program and self-directed learning for students. Additionally, student well-being and mental health are important for leadership development and learning and exercising leadership. Leadership programs should be leaders on this issue and work to foster student well-being and mental health on their campuses and in their communities.

If leadership educators wish to develop or revise existing capstone projects that are self-authored, they should consider the outcomes they wish to achieve with the projects. Our capstone project began as a way for students to take ownership of their leadership development and promote lifelong leadership learning. Over time the projects became informative about what students need and program gaps. Projects could be outlined in a way that focuses on curriculum and program gaps (e.g. what do you still need after completing our program?). They could also focus on specific learning outcomes such as interpersonal skill development. This research suggests that leadership educators have much to learn from students' self-guided capstone projects.

Conclusion

The goals of this project were to examine what students need at the end of a four-year leadership program, to examine if the projects could be grouped and if those groupings would provide information for program evaluation. The results of this research suggest that there are gaps in this particular leadership program and that the projects did yield identifiable groupings. Those groupings provided useful information for the instructors of the course and for the program overall. Specifically, the results suggest that students' well-being (physical, mental, emotional, social, financial health) is important and that many students are lacking in some aspect of their well-being. This is a larger problem than one academic minor program at one institution can fully address. However, this project did seem to help students make progress on their individual well-being and may have influenced other students to consider and address their well-being and overall life balance.

Given that the field of leadership and topics in the field of leadership are varied and deep, it is difficult to cover all the aspects of leadership in four courses. Some students are still looking for more learning on the content that has been delivered in the courses, suggesting that the program could decrease the number of topics covered and increase the depth on those topics. The project could also serve as an open opportunity for students to learn more about topics they are personally interested in, suggesting the iLEAD project is useful for students in this regard.

There are limitations to this research and the results should be taken with some caution. The results may not generalize to other leadership programs or other institutions. Given the qualitative nature of this research, the researcher's presence and positionality during the data collection and involvement throughout the project could have affected the topics the students chose, thus affecting the results of this research. There was a large number of projects evaluated, however, and those projects happened across several years, several sections of the course and several different instructors. Two graduate students that specialize in qualitative research ran the data analysis portion of this research to provide as much rigor as possible. It should also be noted that these results are a reflection of one specific leadership program and do not represent leadership studies in general.

References

- Anderson, M. L., Goodman, J., & Schlossberg, N. K. (2012). *Counseling adults in transition: Linking Schlossberg's theory practice in a diverse world* (4th ed.). Springer.
- Barling, J., & Cloutier, A. (2017). Leaders' mental health at work: Empirical, methodological, and policy directions. *Journal of Occupational Health Psychology, 22*(3), 394–406. <https://doi.org/10.1037/ocp0000055>
- Baxter Magolda, M.B. (2008). Three elements of self-authorship. *Journal of College Student Development 49*(4), 269–284. <https://doi.org/10.1353/csd.0.0016>.
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbooks in psychology. APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (p. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Brearley, B. (2019, February). Why good mental health is a leader's best friend [Blog post]. <https://www.thoughtfulleader.com/why-good-mental-health-is-a-leaders-best-friend/>
- Charmaz, K. (1996). The search for meanings – Grounded theory. In J.A. Smith, R. Harré, & L. Van Langenhove (Eds.), *Rethinking Methods in Psychology* (pp. 27–49). Sage Publications.
- Douglass, C. & Morris, S. R. (2014). Student perspectives on self-directed learning. *Journal of the Scholarship of Teaching and Learning, 14*(1), 13–25. <https://doi.org/10.14434/josotl.v14i1.3202>
- Ferrazzi, K., & Weyrich, N. (2020). *Leading without authority: How the new power of co-elevation can break down silos, transform teams, and reinvent collaboration*. Penguin Random House.
- Heifetz, R., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership*. Harvard Business Review Press.
- Hotho, S., & Dowling, M. (2010). Revisiting leadership development: The participant perspective. *Leadership & Organization Development Journal, 31*(7), 609–629. <http://dx.doi.org/10.1108/01437731011079655>
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Komives, S. R., Longenecker, S. D., Owen, J. E., Mainella, F. C., & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of college student development, 47*(4), 401–418. <http://dx.doi.org/10.1353/csd.2006.0048>
- Maldonado-Franzen, R. (2020). An engaged scholarship approach to create and evaluate a leadership development program for students. *Journal of Leadership Education, 19*(3), 89–94. <https://doi.org/10.12806/V19/I3/A5>
- Oswalt, S. B., Lederer, A. M., Chestnut-Steich, K., Day, C., Halbritter, A., & Ortiz, D. (2018). Trends in college students' mental health diagnoses and utilization of services, 2009-2015. *Journal of American College Health, 68*(1), 41–51. <https://doi.org/10.1080/07448481.2018.1515748>
- Paufler, N. A., Ezzani, M. D., Murakami, E. T., Viamontes Quintero, J., & Pazey, B. L. (2020). Educational leadership doctoral program evaluation: Student voice as the litmus test. *Journal of Research on Leadership Education. https://doi.org/10.1177/1942775120976705*

- Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2015). College students: Mental health problems and treatment considerations. *Academic Psychiatry, 39*, 503–511. <https://doi.org/10.1007/s40596-014-0205-9>
- Rashid, T. & Asghar, H. M. (2016). Technology use, self-directed learning, student engagement and academic performance: Examining the interrelations. *Computers in Human Behavior, 63*(2016), 604–612. <https://doi.org/10.1016/j.chb.2016.05.084>.
- Ruben, B., De Lisi, R., & Gigliotti, R. (2018). Academic leadership development programs: Conceptual foundations, structural and pedagogical components, and operational considerations. *Journal of Leadership Education, 17*(3), 241–254. <https://doi.org/10.12806/V17/I3/A5>
- Saeid, N. & Eslaminejad, T. (2017). Relationship between student's self-directed-learning readiness and academic self-efficacy and achievement motivation in students. *International Education Studies, 10*(1), 225–232. <http://dx.doi.org/10.5539/ies.v10n1p225>
- Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). Sage.
- Schwartz, M.K., Axtman, K.M., & Freeman, F.H. (1998). *Leadership education: A source book of courses and programs* (7th ed.). Center for Creative Leadership.
- Shaeiwitz, J. A. (2002). Mining capstone engineering experiences for program assessment results. *International Journal of Engineering Education, 18*(2), 193–198.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Soria, K., & Werner, L. (2018). Academic leadership courses: Catalysts for students' retention and graduation. *Journal of Leadership Education, 17*(3), 26–41. <https://doi.org/10.12806/V17/I3/R2>
- Soria, K., Werner, L., Roholt, C., & Capeder, A. (2019). Strengths-based approaches in co-curricular and curricular leadership: Opportunities to magnify students' thriving. *Journal of Leadership Education, 18*(1), 116–132. <https://doi.org/10.12806/V18/I1/R8>
- Twenge, J. M., Cooper A. B., Joiner T. E, Duffy M. E., & Binau S. G. (2019) Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005-2017. *Journal of Abnormal Psychology, 128*(3), 185–199. <https://doi.org/10.1037/abn0000410>