

Leveraging
Stakeholder
Insights to Improve
Community College
Student Leadership
Development
Efficacy

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# LEVERAGING STAKEHOLDER INSIGHTS TO IMPROVE COMMUNITY COLLEGE STUDENT LEADERSHIP DEVELOPMENT EFFICACY

by

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#### Abstract

LeaderShape is an independent, not-for-profit organization that develops and delivers leadership development programs primarily targeting college and university students. LeaderShape's growth platform includes a strategic goal to reach new market segments within higher education, such as community colleges, to serve a more diverse student population. Yet an admitted gap exists in LeaderShape's understanding of the need, importance, and/or appropriate program characteristics for community college student leadership development. Through our research questions, this study sought to uncover:

- community college stakeholder (students and administrators) views on student leader identity,
- to what extent inclusion of leadership competencies and pedagogical program elements
   contribute to student leadership development, and
- potential environmental and sociological constraints to program adoption.

A mixed-methods approach generated breadth via a survey instrument to collect perceived identity and sociological factor impacts from the student point of view and depth from administrator semi-structured interviews, a program document review, and historical program effectiveness data. We used descriptive and comparative statistics (including correlation) and an abductive coding process to facilitate our analysis.

# Our key findings include:

Community college students that attended LeaderShape build a strong leader
identity, across leadership competencies, though overall modern leadership
construct coverage differs between (a) LeaderShape and community college
stakeholder expectations and (b) students' rating of themselves and a "good leader."

 Environmental (e.g. funding) and sociological factors (e.g. economic hardship) can negatively impact student engagement in leadership programs or the ability to deliver them, with administrators taking a stronger view of the impact than students.

Our recommendations focus on adjusted content and structural programming approaches to meet community colleges' unique sociological, environmental, and student identity needs, including: (a) further development of program objectives and content to balance modern leadership constructs and competencies and (b) creation of a program which addresses time, fiscal, and sociological constraints without sacrificing leadership content quality.

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#### **Organization Context**

LeaderShape is an independent, not-for-profit organization that develops and delivers leadership development programs primarily targeting college and university students. LeaderShape has trained approximately 91,000 people in over 30 years of providing these programs. LeaderShape's definition of leadership is: "living in a state of possibility, making a commitment to a vision, developing relationships to move the vision into action, [and] sustaining a high level of integrity" (LeaderShape, 2022). LeaderShape offers six programs but we focused on three that align best with our research scope: Institute, Catalyst, and Resilience. LeaderShape conducts their flagship experience, Institute, as a 4-day intensive off-site retreat. Though LeaderShape occasionally facilitates Institute themselves, they most often train college or university staff (or previous Institute participants at the partnering institution) to deliver the program to their students. Catalyst and Resilience are one-day programs that serve as abbreviated, yet still rich, pathways to leader identity development and recovering from challenges, respectively. A 14-member Board of Trustees provides direction, oversight, and vision for the organization; these members are voluntary and meet formally at least twice a year. An executive director (full-time) and two staff members (1 full-time, 1 part-time) manage the daily operations, including program development, business development, and execution of the strategic plan. This core team was larger in the past; however, during the pandemic the uptake of the in-person programs decreased and thus the organization downsized its staff accordingly. Additional people volunteer their time or services to support LeaderShape.

The primary stakeholders for the project are LeaderShape's executive director and its Board of Trustees as they are the creators, executors, and monitors of the organization's 2022-2025 strategic plan. This research provides the foundation for an understanding and conceptualization of leader identity and leadership development at community colleges, which supports LeaderShape's goal to reach a more diverse student population. This insight will aid LeaderShape in making decisions about

program and curriculum development to better align with and be more inclusive of this population as well as a basis to approach community colleges with a more meaningful proposition for partnership and business development. Community college decision makers and students are also stakeholders, though more tangentially as primary and secondary consumers of the future targeted and inclusive programs.

## **Problem of Practice**

LeaderShape's growth platform outlined in their 2022-2025 strategic plan states that they would like to reach new market segments within higher education to serve a more diverse student population (LeaderShape, personal communication, 2022). Our conversations with LeaderShape's executive director reiterated the organization's clear desire to engage community colleges and better understand the leadership development needs of this specific population. Understanding these needs will allow LeaderShape to design programs that best fit this population, providing an opportunity for community college students to fully realize their leadership potential and development.

This area of inquiry is very relevant to current workforce needs and challenges. Students will need leadership skills and knowledge to compete in our rapidly changing economy. In addition, assisting students in increasing their leadership skills empowers them to become positive social change agents (Astin & Astin, 2000). Currently, LeaderShape has partnerships with eight community colleges and would like to double this number to 16 by mid-2023 with the purpose of diversifying the populations they partner with and expanding their reach into underserved networks. However, for this increase to occur their existing programming needs revising to better reflect the leadership development needs of community college students. To date, LeaderShape has not specifically explored leader identity or leadership development of community college students. The last study they conducted on their participating institutions and respective student populations was in 2013-2014 and it did not include research on community colleges.

Community college students interested in developing as leaders will need leadership development skills and abilities to be successful in multiple areas of their lives before and after graduation. Research shows that students who participate in leadership activities have higher levels of educational achievement and explicitly exhibit more personal change than students who are not involved in these activities (Astin, 1993). In addition, students' lack of leadership development skills and abilities can affect the perception they have of themselves as leaders. If these issues are not addressed, these students may be less successful throughout their college career and they may not possess the skills and abilities needed to compete in the workforce once they graduate or be positive social change agents. A supposed contributor to this gap is that leadership potential, which resides in every student, is not often being enhanced in students at the majority of U.S. colleges and universities as many do not engage in developing students as leaders (Zimmerman-Oster & Burkhardt, 1999).

LeaderShape points to a lower percentage of community colleges (versus traditional 4-year institutions) deciding to partner with them on their flagship program, Institute, as initial evidence that a gap exists in their understanding of the need, importance, and/or appropriate program for student leadership development. Some community colleges still choose to engage with LeaderShape for one of their one-day programs. In other cases, LeaderShape fails to make the right staff connection or present the appropriate value proposition for this targeted audience, leading to a reduced reach to the community college student population. Further, we note an inherent potential bias in LeaderShape's approach to this problem of practice: the organization believes that community college students, among students of other historically underserved groups, "may not typically see themselves as leaders" (LeaderShape, personal communication, 2022). We aim to prove or disprove this assumption through our research into how community college stakeholders characterize and envision their development of leader identity.

#### **Review of Literature**

We reviewed literature related to major themes surrounding our problem of practice, including student leadership development, modern leadership theory, identity theory, leader identity, and the community college context. These more targeted views of broad topics (i.e., leadership theory versus modern leadership theory) provided a reasonable starting point for discovery and refinement. Though we focused on peer-reviewed articles, we also reviewed seminal books, dissertations with similar topics and research questions (particularly their references for additional applicable work), leadership inventories, and national education statistics.

We bound our literature review to target more recent resources (i.e., within the last 10 years, stretching to 20 if a source represented foundational concepts still referenced or utilized today). Though we started with a deductive approach given the major themes, we allowed for inductive generation of search topics and avenues when it related to hybrid themes that included the community college context given that specificity proved difficult to find. For example, the theme of student leadership development where the primary research focus or subjects were community college students represent a fraction of the literature compared to numerous studies with traditional 4-year university students. Therefore, we realized that the layering of themes may need to drive how we synthesize the literature and decide on our research questions. Our literature searches were primarily conducted with the aid of Vanderbilt University library's search engine and a wide availability of databases, and we also used Google Scholar for wider searches or to locate resources not present in the Vanderbilt repository. We engaged Vanderbilt's interlibrary loan and new materials services to secure more obscure resources. Finally, when in question, we utilized Ulrichsweb to verify peer-reviewed sources (journals, periodicals, etc.).

How have theories about leadership evolved and what are some of the pervasive theories or constructs in use today?

Modern leadership theory reflects more of the current complexity of organizational, relational, and personal change than the individual-leader focus of the past. Several recent leadership studies and research summaries find that the single leadership trait or "heroic" individual-leader focuses of earlier leadership theories do not adequately address the rapid and constant rate of workforce change nor the shift in relations with others to effectively accomplish work objectives and personal and professional growth outcomes (Cunliffe & Eriksen, 2011; Day & Harrison, 2007; Yukl et al., 2019; Yukl & Mahsud, 2010). Even leadership behavior-based taxonomies and established leadership theories (like transformational leadership) generated prior to this era of rapid change are focusing on a shift from strictly transactional or "one-size-fits-all" leadership aspects to how they can be applied in a more fluid or relational manner (Judge et al., 2008; Yukl, 2012). Supporting this movement, qualitative and quantitative research reveals task-, relations-, and change-oriented behaviors are positively related to managerial effectiveness. For example, for relations-oriented behaviors there is a significant effect on subordinate job satisfaction and a positive effect on leaders' own relational integrity and leadership effectiveness (Cunliffe & Eriksen, 2011; Judge et al., 2008; Yukl et al., 2019). While these studies support the shift, several newer leadership theories designed to meet the needs of leaders in this era of change, like authentic leadership, need additional qualitative or quantitative research to demonstrate their effectiveness alone and in more "real-life" situations (Kalay et al., 2020).

As suggested by their researchers, some of the more current leadership theories are not theories at all but instead represent constructs, overlays, or evolutions to existing generally accepted theories. These constructs offer a means to address current workforce environment needs without a complete overhaul of the current thinking, offering a complementary, versus competing, approach. Examples include: a multi-level, identity-based approach (Day & Harrison, 2007); authentic leadership

(Gardner et al., 2005; Walumbwa et al., 2008); relational leadership (Cunliffe & Eriksen, 2011); and flexible and adaptive leadership (Yukl & Mahsud, 2010). For example, transformational leadership is a continued pervasive, well-studied theory and conceptualization, characterized in part by inspirational motivation and individualized consideration (Judge et al., 2008). Transformational leadership could be matched with the more modern competencies of moral responsibility and dialogic engagement in relational leadership to tie in more "real-life" practices and behaviors (Cunliffe & Eriksen, 2011). These newer constructs expand on and further develop leadership theories rather than needing to stand in isolation. In addition, the constructs of authentic leadership, relational leadership, and adaptive leadership mirror parts of LeaderShape's definition of leadership, particularly, "sustaining a high level of integrity," "developing relationships to move the vision into action," and "living in a state of possibility," respectively (LeaderShape, 2022).

Finally, today's work environment volatility and labor demands call upon higher education and leadership researchers to devise specific student leadership competencies that can be infused into traditional academic preparedness to produce graduates with both technical and relational skills. Leadership competencies, or the "knowledge, skills, abilities, and other characteristics, required to effectively lead people toward the achievement of organizational goals" (Fowler, 2018, p. 182, as cited in Seemiller, 2021), are more summative and inclusive of leadership behaviors, skills, attitudes, etc., and can fluidly be grouped into competency models that fit the environment or population studied. For that reason, we will use the term "competency" going forward to describe leadership attributes, behaviors, etc. Seemiller (2013, as cited in Seemiller, 2021) introduced a widely known student leadership competencies model used in the higher education arena and created as a synthesis of workforce, leadership, and relational competencies. This model groups 60 competencies into eight categories such as Interpersonal Interaction, Civic Responsibility, and Personal Behavior (also matching closely with LeaderShape's definition of leadership outlined above). This student competency model was compared

with accredited academic program data to uncover if the competencies were embedded in program outcomes and to characterize the extent to which they are prevalent and frequent in the current higher education arena (Seemiller, 2021). The study found substantial prevalence overall for the 60 competencies and provides a picture of the most frequent competencies (Evaluation, Verbal Communication, and Ethics) (Seemiller, 2021). Important for our research, the findings also highlight differences in competency coverage between 2-year and 4-year institutions (for example, Verbal Communication being most prevalent overall; however, Ethics being the next most prevalent for 2-year institutions versus Evaluation for 4-year institutions) (Seemiller, 2021). The results have implications for our evaluation and comparison of competencies deemed important by community college stakeholders and LeaderShape as well as how this might translate to extracurricular, as opposed to academic, program implementation.

In summary, we conceptualized modern leadership skills, behaviors, etc., overall, as competencies. We focused on competencies associated with "student to workforce" and modern leadership needs, specifically, a multi-competency approach inclusive of transformational, adaptive, relational, and authentic constructs.

## How is leader identity developed and what role does it play in leadership development?

Identity theory sees identity as a stable and lasting object propelled by a fundamental dynamic equilibrium that continuously operates in a self-adjusting feedback loop (Burke, 1991, as cited in Miscenko et al., 2017). Baltes and Carstensen (1991, as cited in Day & Harrison, 2007) defined identity as "the culmination of an individual's values, experiences, and self-perceptions" (p. 365) and it is significantly important in the development of a leader. Identity grounds leaders, helping them comprehend who they are, their major goals, and their strengths and weaknesses (Day & Harrison, 2007). Identity development, founded on the early work of many including developmental psychologist

Erikson (1959, as cited in Day & Harrison, 2007), posits that identity develops in conjunction with environments and experiences that lead to a self-conceptualization spanning the spectrum from simple to complex. Leader identity, or how one begins to think of themselves as a leader, develops as the individual gains different, complex leadership knowledge and experiences (Day & Harrison, 2007). The environments and experiences in which a person's identity develops can be considered part of the self-adjusting feedback loop described in identity theory.

Building a leader identity calls for attention to the scaled nature of leader identity and experience, both in terms of organizational level (more highly developed skills needed at higher levels) and of personal leadership development (some skills must be mastered before moving to more sophisticated ones) (Day & Harrison, 2007). Leader identity at its core addresses facets of leadership development that are less observable but more foundational. For example, LeaderShape believes that true leadership involves making a commitment to a vision but, before that vision can be realized, relationships must be cultivated as they are the foundation of making the vision come to life. Also, according to Clapp-Smith (2019), the development of leadership skills is based on identity practices that lead a person to ask themselves, "Who am I as a leader?" and "What does effective leadership look like for me?" These questions allow for a person to critically evaluate their leadership capabilities and make plans which address their weaknesses, refine their strengths, and close the gaps between the leadership behaviors they implement from those they just discuss as being important. In addition, according to Priest and Middleton (2016), the role of identity could be used as a motivating force not only for an individual's leadership development, but also have a positive impact on leadership education and training. However, for that motivating force to be sustained and improve long-term interest in developing and practicing leadership, the role of being a leader must become a part of the person's identity (Priest & Middleton, 2016).

The identity-based approach presented by Clapp-Smith (2019) links the teaching of leadership development to an individual's identity which is embedded in a person's unique experiences throughout their life across multiple domains including work, family, friends, and community. This multi-domain approach to identity development links a person's past experiences, including those as a leader, to their current identity as a leader and operates as an instrument of revision for their future leader identity (lbarra & Barbulescu, 2010, as cited in Clapp-Smith, 2019). For example, a student's future identity can exist parallel to their current identity (Anderson et al., 2012, as cited in Yadusky et al., 2021). This future identity can act as a guide and motivate students as they work through transitions and developmental leadership processes (Yadusky et al., 2021). The Clapp-Smith (2019) approach also considers a person's distinctive assumptions, interpretations, and life experiences as it pertains to leadership; these accounts are then used to create a narrative that is unique to the individual's leadership development. Using this multiple domain approach allows us to see how the entirety of a person, including their identity, evolves into a leader (Clapp-Smith, 2019).

According to Miscenko et al. (2017), leader identity progresses along four dimensions: meaning, strength, integration, and level. The most pertinent dimension for our study is meaning which is described as how an individual defines leadership (Burke, 2006, as cited in Miscenko et al., 2017). Students enter leader development programs with their own meaning of leader identity shaped by their assumptions, interpretations, and life experiences, but that meaning soon changes resulting from a new set of identity meanings gained from the programs. For example, LeaderShape's view of leadership includes that all leaders should live in a state of possibility. When students enter LeaderShape's development program it induces self-reflection about what they believe. If students' identities do not reflect what the program is teaching, i.e., that they should live in a state of possibility, then the literature suggests programs facilitate an identity re-construction that would lead to the adoption of a new meaning of leadership (Day et al., 2009, as cited in Miscenko et al., 2017).

How can leadership programs effectively develop student leadership potential to prepare them for the real world?

Leadership development, as defined by Brungardt (1996, as cited in Eich, 2008), incorporates virtually every type of growth or phase of development that progresses, inspires, and aids in a person's leadership potential. Zimmerman-Oster and Burkhardt (1999) concluded that every student possesses leadership potential which colleges and universities can develop through leadership programs and activities. According to the literature, leadership programs are a better way to prepare students for leading in the real world; however, even if a college offers extracurricular leadership opportunities they are typically not as comprehensive as a formal leadership program (Eich, 2008).

If colleges and universities decide to offer leadership programs, research suggests they should provide students with high quality learning which means engaging in consistent program development, practicing the kind of leadership they value in their institution or organization, and not only assisting students in becoming leaders but aiding them in understanding why it is important to be a good leader (Eich, 2008). According to Zimmerman-Oster and Burkhardt (1999, as cited in Owen, 2012), the program should have clear objectives, a sound learning methodology, and a rich, supportive learning environment. The most successful leadership programs have well-defined theoretical orientations and include a strong relationship between the missions of the institution and the leadership program (Zimmerman-Oster & Burkhardt, 1999, as cited in Owen, 2012). Conveying this shared purpose is believed to be a required step in the success of a leadership program (Morphew & Hartley, 2006, as cited in Owen, 2012). Even with all these elements in place the question of whether the leadership programs will be effective for college and university student populations still exists. According to Owen (2012), decision makers must understand the factors, institutional and programmatic, that shape a student's leadership experiences before they can successfully assess and decide whether a leadership

program's design and delivery will be effective on their campus. This issue of effectiveness must be addressed as it is one of the concerns at the heart of student leadership development.

The effectiveness of leadership programs in colleges was demonstrated in a Kellogg Foundation study of 31 youth leadership development projects conducted by Zimmerman-Oster and Burkhardt (1999). Their study utilized action research strategies (a method used to develop and test programs through collaboration in a real-world setting) to assess the process and outcomes of formal leadership programs on college campuses. One of the programs they assessed was LeaderShape. The longitudinal study found that students who participated in formal leadership programs had significant positive changes on measured leadership outcomes and enhanced their overall leadership skills. The study also revealed that the LeaderShape program successfully increased college students' ability to create organizational visions and improved their transformational leadership skills (Zimmerman-Oster & Burkhardt, 1999). However, while there are many leadership development program evaluation studies such as the one discussed above, many were situated in an organizational context and thus the generalizability to student populations is uncertain. Reyes et al. (2019) argue that the leadership experience, content, and goals of higher education leadership development warrant a different lens. Additionally, Reyes et al. (2019) also organized a meta-analysis of articles and studies where leadership development recipients were higher education students and applied the known effectiveness measures of organizational leadership development to those results to determine effectiveness within higher education. The results highlight that higher education leadership development programs are effective in certain measures; however, further research specific to this type of leadership development, its audience, and attention to potential multiple-variable bias may be fruitful.

What do we know about the current community college context and environment, especially as compared to the context of traditional 4-year institutions?

Community college environmental factors, such as institutional objectives, organizational structure types, and legislative and funding discrepancies, may impact the institutions' focus and ability to implement formal, successful leadership programs, especially as compared to traditional 4-year institutions. Additionally, community colleges are under external pressure to meet increased workforce and academic outcome demands, including workforce preparedness such as social skills; however, these institutions may require internal restructuring to do so (Bailey et al., 2015; Calcagno et al., 2008; Castro & Clyde, 2018; Wyner, 2019). Historically, community college has represented an expansion of higher education with a focus on opportunity through access ("open-door") and thus increased throughput (Bailey et al., 2015; Boggs & McPhail, 2016; Calcagno et al., 2008; Wyner, 2019). However, today's workforce needs, legislative reform requests, and public funding criteria call upon community colleges to additionally produce improved academic outcomes and students that can contribute successfully as they fill the labor gap (Bailey et al., 2015; Boggs & McPhail, 2016; Calcagno et al., 2008; Wyner, 2019). This balance of access and success as institutional objectives, with external pressure on the latter, will continue to influence program decisions, resource allocation, and administration bandwidth (Boggs & McPhail, 2016).

In-depth research points to a reimagination of student success via attention to or restructuring of institutional components like program structure, equity, labor market outcome, and support services (Bailey et al., 2015; Wyner, 2019). Highlighting this is the relation of institutional or organizational type to organizational effectiveness. Smart and Hamm (1993) found that 2-year colleges with a dominant adhocracy culture (characterized by entrepreneurship, growth, and adaptability) are perceived to be the most effective overall organizationally and effective against the specific measure of student personal development which is most related to our concept of student leadership development (Smart & Hamm,

1993). Therefore, community colleges with an adhocracy culture may be best suited to partner with external companies like LeaderShape or approaching colleges with an adhocratic proposition to leadership programming may yield increased success for organizations like LeaderShape.

From an external support standpoint, national funding data reveals that community colleges receive less public funding than 4-year institutions, despite educating ~40% of undergraduates and a higher proportion of underrepresented students (Campbell & Wescott, 2019; Edgecombe, 2022). Community colleges thus operate with fewer resources than 4-year institutions as they try to affect and improve the academic outcomes being demanded of them (Edgecombe, 2022). Additionally, declining public funding calls for the community college to engage in pursuing external funding sources and creating new aid and tuition structures, taking away focus on extracurricular development (Boggs & McPhail, 2016). Finally, community colleges experience an interesting counter-intuitive response to economic cycles. In a downturn, as state support for education is typically cut, community colleges suffer the most due to their significant dependence on an unequal allotment of public support (Boggs & McPhail, 2016). However, this is also the time when enrollment increases as those out of work, especially in more blue-collar jobs, turn to education to gain skills for reemployment (Boggs & McPhail, 2016). Therefore, while literature emphasizes a call for increased academic outcomes and workforce preparedness at community colleges, including skills related to leadership, more research is necessary to characterize the exact drivers of academic outcomes (institutional, individual), the extent of their effect, and the impact of the funding differential on how institutions can address these areas.

Community college student sociological factors, such as personal demographics, college attendance pattern, and economic status may impact their ability to engage and participate in leadership opportunities. Based on national data, from a demographic perspective as compared to 4-year institution students, community college students are more likely to be Hispanic, independent (characterized as financially independent from their parents), have their own dependents, live off-

campus, work full-time, and/or attend college exclusively part-time (Campbell & Wescott, 2019). They are also slightly more likely to be female, Black, and/or older (by median age) (Campbell & Wescott, 2019). Supporting the data on likeliness to be commuters, part-time attendees, and returning adult students (those 25 years of age or older and re-entering education after a gap), is recent research designed to fill a gap in understanding how to engage these students (Jacoby, 2014). This is also impactful when considering statistics such as greater than 45% of full-time students work and 70% of part-time students work while attending college, which may influence their educational experience and ability to participate in extracurricular activities (Campbell & Wescott, 2019; Jacoby, 2014). The literature suggests interventions to lend support to these students focused on maximizing the shorter time they tend to spend on campus (e.g., concentrate and focus time into meaningful blocks), institutional support (via faculty as the most interacted with role on campus and via innovative learning methodology), and integration of education with students' work activities (Jacoby, 2014). Finally, community colleges enroll the most economically challenged students. A 2015 survey of 4,000 community college students revealed that half struggle with food and/or housing security (Goldrick-Rab et al., 2015, as cited in Boggs & McPhail, 2016). Therefore, outside of school, the understandable concern of many students is with more entry levels of human need than participation in additional extracurricular activities.

# **Project Questions**

## **Research Questions**

Three research questions guided this investigation examining community college stakeholders' definitions and perceptions around leadership competencies and potential environmental and sociological factors affecting student leader development:

- How do different community college stakeholders define competencies necessary for students to develop as leaders?
- 2. To what extent does the inclusion of various competencies and pedagogical elements in extracurricular leadership development programs contribute to the development of community college students as leaders (including their leader identity)?
- 3. What is the relationship between community college environmental and sociological factors and perceived adoption and success of leadership programs?

The insights this research provides can help inform our partner organization, LeaderShape, as they design programs or consider program or partner needs that best fit the community college population, providing an opportunity for community college students to fully realize their leadership potential and development.

# **Conceptual Framework**

Our theoretical framework blends leadership theory, identity theory, student leadership development, and the community college context. First, modern leadership theory and constructs harness the continued expanding and evolving thinking around leadership and assume a complex and multidimensional definition (Day & Harrison, 2007) rather than earlier theories focused on single-leader or single-dimension characterizations (traits, skills, behaviors) proposed in the past by many authors and researchers. Our conceptualization of modern leadership competencies focused on a multi-disciplinary approach inclusive of transformational, relational, adaptive, and authentic constructs that lends to an open discovery of how leadership development for community college students may be constructed and framed as they prepare to enter the modern workforce. Next, our theoretical framework calls upon identity theory as defined earlier by Baltes & Carstensen (1991, as cited in Day & Harrison, 2007). The extent to which leadership programs promote leader identity development in sync with the specific

leader identity needs for the community college student population and environment will reveal dimensions of effectiveness and gaps to address for growth.

In thinking about leadership development infusing these leadership competencies and developing students' leader identity, and assuming every student possesses leadership potential (Zimmerman-Oster & Burkhardt, 1999), we point to the college or university as an important point of opportunity and mechanism to craft leadership potential at the student level or stage of development. The literature gaps in higher education, specifically community college, leadership development effectiveness lend to our investigation extending this body of knowledge through our second research question. In addition, our framework addresses not only prevalence but also pedagogical differences in leadership development program components and the impact on effectiveness. Finally, the community college context framed and underpinned our investigation given the expectation that these institutions meet society's commitment of providing educational opportunities as the foundation for economic growth and upward mobility (Bailey et al., 2015) through functioning as the primary "on-ramp" toward bachelor's degree attainment (access) and as the primary "off-ramp" for immediate job placement (success), with both objectives serving as a conduit for marginalized and underprepared students to realize the "American Dream" (Wyner, 2014). Yet while the community college is under pressure to meet these increased workforce and academic outcome demands, including infusing constructs like leadership to produce skills ready to meet modern workforce needs, external (declining public funding and resources), sociological (student demographics and attendance patterns), and environmental (institutional organization shifts) factors may impede or supersede progress in the focus on student leadership development and lends toward our research quantifying these impacts to demonstrate the difference and attention warranted on these institutions versus traditional 4-year institutions.

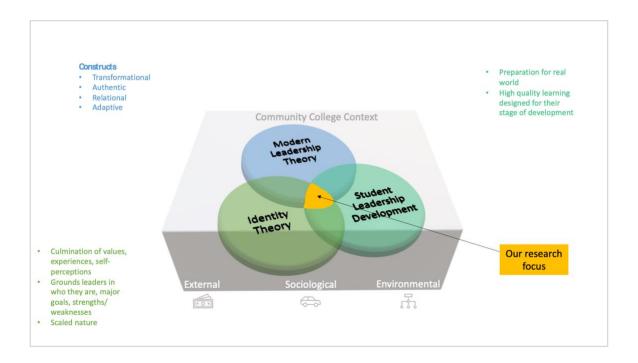
This research was framed in an institutional context, both directly via participation of community college administrators currently situated in this context and indirectly via past participation

of current and former community college student attendees of LeaderShape. This context is shaped by the continued shortage of qualified workers (which started before the pandemic and is now exacerbated by the post-pandemic surge for talent) requiring sourcing from new and different avenues like community colleges and the same workforce environment that the former community college students currently find themselves a part of. Our practical study goals included reviewing how community college student leader identity is characterized as they begin their entry or early career within this workforce and assisting leadership development organizations in addressing the topic effectively for this same population. Our intellectual goal elaborated on leadership development and identity theory within a community college stakeholder context.

Our concept map (presented in Figure 1) highlights the intersection of our theoretical framework elements including highlighting our specific conceptualization of modern leadership. As the community college context became so important and pervasive to addressing our research focus and questions, instead of a fourth component, it is structured as an underpinning mechanism that touches upon all theoretical and conceptual areas. This also demonstrated the importance of a focus on this context in our data collection and analysis planning.

Concept Map

Figure 1



# **Project Design**

# **Data Collection**

We employed a mixed-methods, largely descriptive study approach as we sought to characterize the perception of stakeholder groups within a given context (the "what" and "how") and dive a little deeper into the "why" their perceptions have formed in this manner. To collect data to answer our research questions and within our approach framework, our study utilized a closed-ended survey (including two open-ended questions), semi-structured interviews, a program document review, and a historical program outcomes data review.

#### Survey

To investigate the student as stakeholder aspect of research question #1, we collected data on how community college students (current or former) define competencies necessary to develop as leaders. Given their likely more limited maturity in leadership development at this life stage, answering this question in retrospect and with a lens of significant experience to borrow upon would likely prove difficult or brought forth as incomplete. Therefore, we collected data on the extent that they perceive themselves as leaders (i.e., their leader identity), rated against modern leadership competencies, and on the extent to which they perceive specific competencies define a good leader. The latter we estimated would best substitute for their "ideal" in terms of leadership competency development, and the difference between the assessment of their current perception of themselves as leader and their perception of a good leader on the exact same competencies would surface how much of a gap currently exists in their leader development. In addition, to answer research question #3, we collected data from the same population (and via the same instrument) on the degree to which they perceive sociological factors (noted in literature to affect the community college experience) mediate or moderate the ability for community college students to participate in leadership development. This helped quantify the extent to which environment, not just access to programs, may impact the ability to engage in leadership development activities.

Our study population initially derived from a database (provided by our partner organization) of people that went through LeaderShape as community college students. Some may still be community college students and others would have left the community college environment. Purposive sampling from this database provided easier access to this type of population and saved us from attempting to engage community colleges directly which we assumed may not yield an acceptable level of response. The database population attended one of 12 community colleges located in the Western United States (with a concentration in Arizona). The database contained email addresses obtained at the time of

attending a LeaderShape program unless LeaderShape had updated current email data from their ongoing alumni outreach efforts. One potential limitation with sampling from this database was no guarantee that people were still utilizing or accessing these email addresses and thus we expected some emails not to reach the intended participants. Given the average tenure at a community college is less than three years (Bailey et al., 2015), our first thought was to filter the data to exclude any email addresses tied to a .edu institution for participants that attended more than two years ago. However, given some potential participants with a .edu address may now be employed by an educational institution and thus still a viable participant, as well as considering the uncertainty of how many participants we would be able to reach overall due to the limitation mentioned previously, we decided to include .edu addresses. Finally, though the dataset included people that attended one of four LeaderShape programs, we decided to not include participants from one program which focused more on communication than on leadership as we have conceptualized it for this study. These adjustments led to sending the survey to an initial potential population of 373 participants. Assuming that only approximately 20% of the database was still valid and reachable, our goal was to obtain at least 40-50 responses which would equate to a 43-54% response rate.

Employing a closed-ended survey to collect this data corroborated with the data collection approach of many student leadership identity and development studies we reviewed in literature. We used Qualtrics as our survey provider. As some previous studies in the literature have done, for research question #1, we utilized leadership scale instruments designed to measure the degree of leadership competency (directional, i.e., more or less than the norm). To measure transformational leadership competencies, we used the Multifactor Leadership Questionnaire (MLQ), a vetted and correlated instrument that provides a means to inquire both about self-perception of leadership competence and about perception of leaders in the same (Bass & Avolio, 1995), matching the way we intended to

uncover the gap in self vs. idealized leader competency level. For example, a competency statement reflects in two ways as follows<sup>1</sup>:

As a leader...

I talk optimistically about the future.

The person I am rating...

Talks optimistically about the future.

For our focus, we decided to use the transformational leadership attributes scales within the MLQ: Idealized Influence (Attributes), Idealized Influence (Behaviors), Inspirational Motivation, Intellectual Stimulation, Individual Consideration (four statements each). To measure authentic leadership, we included selected items from the Self-Awareness, Internalized Moral Perspective, Balanced Processing, and Relational Transparency scales of the Authentic Leadership Self-Assessment Questionnaire (ALQ) (van de Geest, 2021; Walumbwa et al., 2008). This equates to two questions for each ALQ scale with some overlap with MLQ statements to reduce repetition and survey length. To measure relational leadership, we matched the five dimensions of Inclusive, Empowering, Purposeful, Ethical, and Process-oriented to any statements already selected from the MLQ and ALQ and borrowed questions from the Relational Leadership Questionnaire (RLQ) (Carifio, 2010; Komives et al., 2013). Adaptive leadership is considered still very fluid and no validated, empirical scale exists. As it is still a key competency and we wanted to investigate given the amount of change leaders experience in today's work environment, we mapped four items from the MLQ and ALQ scales to adaptive leadership competencies of Self-Awareness, Cognitive Complexity, and Social Intelligence. Figure 2 shows the relationship between our four modern leadership constructs and their associated competencies.

<sup>&</sup>lt;sup>1</sup> Copyright © 1995 by Bernard Bass & Bruce J. Avolio. All rights reserved in all media. Published by Mind Garden, Inc. www.mindgarden.com

Figure 2

Modern Leadership Constructs and Their Associated Competencies



In addition, we included sections in the survey to assess the impact of certain sociological factors on the community college experience, quantify LeaderShape impact at their current stage of leader development, and demographics questions to summarize the population and use in comparative purposes (survey export presented in Appendix A). Likert scales, where utilized, employed a common starting point (0) to aid in comparing means across scales and in relation to other factors. We offered an incentive to complete the survey: an entry into a drawing for one of two \$50 Amazon.com gift cards (increased from \$25 after the initial contact yielded a subpar response rate). A second survey consisting of only the information to be entered into the drawing (name and email address) was linked to the primary survey to route the participant from one to the other; however, no data was shared between the surveys to maintain confidentiality (i.e., there was no tie to name or email address to the original survey data).

Our recruitment scheme consisted of an initial email and two subsequent reminder emails (sent at approximately two weeks and four weeks after the initial) with the survey link included and sent by LeaderShape on our behalf. Potential survey respondents have familiarity with LeaderShape and thus communications generated from them stood an increased chance of email views and survey completion. After the initial recruitment email was sent, we removed from further survey communications any

bounced-back emails and any emails entered into the drawing that matched our initial list (and thus we assumed completed the survey). The initial recruitment email generated only a few (< 5) responses. We adjusted the first reminder email wording to emphasize the participants' importance given their LeaderShape participation and increased the incentive; yet, after two reminder emails, we still only had 14 viable responses. Attempting a new strategy, we asked LeaderShape to send out a final survey announcement via social media in hopes of pulling in any community college students that subscribed to their media channels. LeaderShape posted an announcement on LinkedIn, Facebook, and Instagram. This yielded an additional 425 responses. Though the postings clearly requested responses from people that were community college students at the time of attending LeaderShape, unfortunately the majority of responses from the social media push were from bots, 4-year university attendees, or people that had not attended LeaderShape at all. We discerned the distinctions through a safeguard in place asking each participant to list the name of the community college they attended. This allowed us to disregard responses not from our target audience and when combined with the 14 original responses, led to a final 57 viable responses, meeting our response target.

## Final Sample Demographics.

The sample of 57 responses represented up to 22 different community colleges, still mostly concentrated in the western United States and included a new contingent from a college in New York. As we did not ask which community college the first 14 respondents attended, we cannot determinatively name their institutions though we know they would have come from one of 12 listed in the LeaderShape database. Demographic questions in our survey focused on personal demographics (e.g., gender, race, ethnicity) and descriptions of the respondents' community college experience (e.g., community college completion, attendance status, employment status, etc.). Full statistics are included in Appendix B, Table 4. Comparison data, where available, is presented from the National Center for Education Statistics (NCES; representing national 2-year institution data), Maricopa County Community

College District (MCCCD; representing the 10-college system where the majority of the 373 initially contacted respondents attended community college), and LeaderShape community college attendee data (which generated the initial 373 potential survey population). This lent context and sources for reference from national, local, and LeaderShape attendee perspectives when looking at our final sample's demographic characteristics.

There were a few demographic characteristics that fell outside of the context norms. First, in terms of gender, the majority of our population (57.1%) identified as male and most of the remainder, female (39.3%). This is a flipped opposite of NCES and MCCCD comparison data where approximately 55-57% identify as female. Given the range between female and male percentages still resides around a mid-range, this does not represent a large discrepancy. Second, with regard to race and ethnicity, we noticed that our population reported a much higher percentage of people identifying as American Indian or Alaskan Native (28.6%) compared to single digit percentages in the comparison data. We noted that we did not include 'Hispanic, Latino/a/x, or of Spanish origin' as a category within our race question while the comparison datasets did. Instead, per the latest diversity statistics guidance, we created a separate question for this under a construct of ethnicity. Knowing that many in our final sample attended college in the Western United States, particularly Arizona, we wondered if some respondents indicated American Indian or Alaskan Native as their race either due to having that heritage or to the absence of Hispanic as an option. To determine this, we created a test Hispanic race category by redistributing the number of responses to every race category that also indicated "Yes" to the separate ethnicity question into its own bucket. Doing this yielded a lower percentage of people identifying as American Indian or Alaskan Native (19.6%), however, this still remains above the single digit norms. Shifting to thinking on survey response behavior as a possible cause, we noted that American Indian or Alaskan Native was the first option in the list of potential responses and wondered if placement bias (i.e., to speed up completion, selection of the first option) was at play. This did not occur for many other

demographic questions and thus does not provide a strong explanation. Finally, we noted that one of the administrator interviewees mentioned a high percentage of American Indian students at one of the community colleges engaged with LeaderShape; however, that institution is not represented in the survey observations where college attended is included (74% of the final sample). Therefore, a firm rationale for the higher than expected response to the American Indian and Alaskan Native race question option remains elusive.

Third, three-quarters of our final population transferred to a 4-year college or university as compared to 34% of MCCCD students overall (MCCCD, 2022). This triangulates with the experience of the community college administrators we interviewed who witness more students involved in leadership activities on campus furthering their education at a 4-year institution (and potentially a greater propensity to attend full-time as demonstrated in our statistics). Finally, quite bafflingly, 46.4% of the final population indicated they lived on-campus through the majority of their community college experience. While we learned that some community colleges now have residential options (dorms, etc.), that is not the case for the up to 22 colleges represented in our population. One member of our research team who worked for a community college in the past recalled that some students who live in close proximity to campus (even as close as across the street) may consider that "on-campus." To test a theory that a larger proportion of the social media respondents transferred to a 4-year institution, where they would be more likely to reside on-campus, and instead completed LeaderShape there, we looked at data that might confirm this direction such as the percentage of the social media population attending Institute (more often a 4-year institution program) and the percentage of those saying they resided on campus. Three of the five measures tested indicated a closer affinity to 4-year institution attendance; as it was not overwhelmingly conclusive, we could not surmise this fully accounts for the curious response. Another possibility is whether the survey item was mistakenly read by some as

residing on-campus through the majority of their college (versus community college) experience, given many transferred to 4-year institutions where they may have lived in on-campus housing.

Addressing some of the independent variables in our comparative analyses, the majority (64.9%) attended LeaderShape's flagship Institute program and it has been 2-3 years since attending LeaderShape for nearly half (45.6%) of the sample. Eighty-four percent indicated that they somewhat to strongly agreed that LeaderShape was a valuable experience in developing their capacity to lead. Finally, 67.9% are now employed full-time or part-time while 17.9% are still students. Full descriptive statistical results for these variables are also included in Appendix B, Table 1.

#### Interviews

A total of eight interviews were conducted with community college administrators to investigate portions of research questions #1 and #3. Six of the interviews were conducted via Zoom and two administrators completed the student leadership development questionnaire we created as an alternative to a face-to-face interview for those administrators who could not meet synchronously. The convenience sample of administrators consisted of two community college administrators who have worked with LeaderShape for many years, two administrators who work at community colleges that have engaged with LeaderShape in the past, and four administrators from other community colleges from across the country who had never worked with LeaderShape.

The process of finding our interviewees began with the executive director of LeaderShape sending an email invitation to four community college administrators she worked with in the past. The first two administrators were from the same community college in Arizona and replied immediately.

Both contacts, the Student Services Director and the Coordinator of Student Life & Leadership, agreed to face-to-face interviews. The other two contacts were the Director of Student Affairs at a community college in New York and the Coordinator for Student Engagement at a different college in Arizona. These

latter two administrators were contacted seven times but never responded to invitations or voicemail messages.

We asked the Student Services Director to recommend other administrators for us to interview. She provided two additional contacts within her school district that she thought would be appropriate; they had not worked with LeaderShape directly but could give us general information on student leadership development within the community college. Both contacts were administrators in the Student Life & Leadership department on different campuses and agreed to be interviewed for the study.

The last four interviewees were from community colleges who had no connection with LeaderShape. Two of these administrators were from a community college in Texas, identified as part of our peers' existing professional network. One administrator, the Associate Vice Chancellor for Student Engagement & Academic Success, agreed to complete the student leadership development questionnaire. The other administrator, the Executive Dean of Academic Advising and Special Programs, scheduled a face-to-face interview.

The last two administrators were a part of our own professional network. The first, the Vice President for Strategy and Organizational Effectiveness at a community college in New Mexico, agreed to complete the questionnaire. The second, the Associate Vice President of External Affairs, Development, & K-12 Operations at a community college in Michigan, agreed to be interviewed. We invited another administrator from this college to interview or complete the questionnaire, but they did not reply to our invitations.

The first part of the interview pertained to research question #3. Literature reveals that community college environmental factors may impact the institutions' focus and ability to implement formal successful leadership programs; the questions asked in this portion of the interview would assist us in discovering if this was the case for institutions that worked with LeaderShape. We asked questions

about the outcomes of a successful leadership program for community college students; factors that should be included in a leadership program for it to be successful and long-lasting; how their institution has been affected by factors that could possibly impact the adoption and implementation of a successful leadership program; and lastly, the extent to which public funding or other factors affected the focus of the institution on implementing leadership programs. Also, in this part of the interview we asked administrators specific questions regarding their partnership with LeaderShape. For example, why their institution partnered with LeaderShape, what they were hoping to get from the partnership, and the challenges they faced in the partnership. These questions were not asked in the interviews with administrators whose organizations were not partnered with LeaderShape.

The second part of the interview consisted of a sorting exercise using Google Jamboard to discuss leadership qualities or characteristics the administrators believe students should possess if they wish to be good leaders. The interviewees reviewed 13 statements based on competencies for three leadership constructs: transformational, authentic, and relational leadership. These leadership competencies were summative and inclusive of leadership behaviors, skills, attitudes, etc., and could fluidly be grouped into competency models that fit the environment or population studied. Key to our triangulation with the leader competencies from a student point of view, we also mapped these competencies to the leadership competencies in our survey. We asked administrators to place the competency statements into four categories: 0-Not very important, 1-Somewhat important, 2-Important, and 3-Very important. After all of the interviews were completed we ranked the statements according to the administrators' selections. The full interview protocol, questions, and the student leadership questionnaire (interview alternative) are presented in Appendices C-E.

### **Program Document Review**

To investigate research question #2, we reviewed LeaderShape's current program design and state of the competencies in their program in comparison to the literature. LeaderShape's executive

director indicates that the program has evolved but was not able to share specifics. Their evolution may track with the shift in leadership theory as it has evolved from the single leadership trait or "heroic" individual-leader focuses of earlier leadership theories to newer leadership theories that are designed to meet the needs of leaders in this era of change.

We used the current program design to examine the pedagogical elements of the LeaderShape Institute program. Research suggests that colleges and universities who offer leadership programs should provide students with high-quality learning and have clear objectives, a sound learning methodology, and a rich, supportive learning environment. The present design of the Institute program was examined in comparison to information found in literature to determine if LeaderShape met the pedagogical elements that compose a high-quality, successful student leadership program.

### **Data Analysis**

### Survey

## Descriptive Statistics - Frequency, Range, Scale Validity, Mean, Standard Deviation.

We used the statistical software package R to analyze all closed-ended survey data. For all statistics, blank responses were excluded from the variable (column) calculations or where a statistical analysis depended on a complete observation (row). Descriptive statistics were generated for closed-ended categorical variables including demographic data, starting with frequency (both count and percentage) and range (listed for Likert scale questions/statements) (see Appendix B, Tables 2, 4-5). Each item measured via Likert scale was also checked for normal distribution or skew via frequency bar plots; all presented an expected distribution curve a bit skewed to the left indicating higher frequency of leadership behaviors for "good leaders." Then, for all items that rolled up to competency scales, the respective scale's individual items were grouped into two versions: "good leader" (the scale items relating to respondents' assessment of a good leader against the specific competency) and "self"

assessment (the paired, similarly worded items relating to respondents' assessment of themselves against the same competency) (Appendix B, Table 3). Scale items were only reported in aggregate, not as individual statistics per scale statement (for example, the four items under Individual Consideration are reported aggregated as one metric), unless further tests demonstrated low reliability as a grouping.

Cronbach's alpha was calculated on each of the scales to confirm internal consistency and reliability, i.e., if responses were consistent between scale items. Though internal consistency has already been proven for the Multifactor Leadership Questionnaire (MLQ) scales through its historical use and vetting, we still ran a Cronbach analysis in our study to confirm and compare against the scale's global results. Our reference standard for alpha was the generally accepted rule that 0.6 to 0.7 is acceptable and ≥ 0.8 is very good (Ursachi et al., 2015). Therefore, for our data, if alpha was 0.6 or greater for one or both of the "good leader" and "self" scale scores for a given competency, we considered the scale valid. If not, we did not aggregate the scale items into an overall scale score but instead kept them as individual items to still evaluate in further descriptive analyses. This occurred for two competencies: Relational Transparency (Authentic Leadership) and Empowering (Relational Leadership). Cognitive Complexity and Social Intelligence (both Adaptive Leadership) were each only represented by a single item on our survey and thus were not scales to begin with and remained in their individual state for further comparison.

In preparation for calculating the mean and standard deviation for items bound by a Likert scale, the observations for all categorical variables of this type were converted to continuous values, i.e., the numerical equivalents of their descriptive scale points. For each competency scale, a new variable comprised of the row means across the scale's respective competency statements was created. Then, mean and standard deviation were computed on the competency scale variables (both "good leader" and "self" except for the items noted above that remained in their individual scale item states), each sociological factor variable, the LeaderShape program effectiveness question ("In general, LeaderShape

was a valuable experience in developing my capacity to lead."), and the one continuous variable present in our survey: the percentage a respondent attributes LeaderShape to how they define themselves as a leader today.

## **Descriptive and Inferential Statistics – Correlation and Statistical Significance.**

For competency scales, we ran a Pearson correlation between the means for each corresponding "good leader" and "self" ratings and determined if they were moderately to highly correlated (i.e., 0.5 or above). We also tested statistical significance via a paired t-test, mimicking the analysis typically done for pre- and post- test data where rated items are exactly the same for each measurement. Similarly, overall "good leader" and "self" aggregate means (i.e., housing the individual 28 statement items for each) were calculated and tested for correlation and statistical significance (Appendix B, Table 3). Additionally, the difference between the overall means was produced to characterize the gap in competency assessment. We intended for this gap statistic to be a key indicator of the hurdle that respondents need to bridge in order to exhibit competencies of a "good leader." This gap would then be used as the dependent variable and evaluated against the following independent variables: LeaderShape program, years since LeaderShape attendance, LeaderShape effectiveness in leader development, and current employment status. These comparisons would aid in characterizing LeaderShape's impact on the gap that the programs seek to minimize. The gap ended up being quite minimal (.01) and while the overall means were correlated, they were not statistically different from each other. Therefore, we selected the overall "self" rating to stand in as the dependent variable in further analyses. However, the gap and the paired "good leader"/"self" competency correlations and significance still aided us in answering research question #1, how community college students (or former students in this case) define competencies necessary for them to develop as leaders.

The sociological factors (characteristics of the community college student experience) question block contained a closed-ended Likert scale rating on factor likeliness to affect student participation and two open-ended questions posed to understand why respondents rating factors as Extremely or Moderately Likely think they have an effect and their thoughts on ways to make participation more likely. The closed-ended question's seven factors were analyzed for inter-relatability and correlation by running a factor analysis and generating a full correlation table (correlation method: Pearson). This shed light on factor contribution in relation to one another, lending insight into research question #3, what the relationship might be between community college sociological factors and perceived adoption of leadership programs from the student point of view. Responses to the two open-ended questions were exported as text and informally reviewed deductively for rationales regarding factor effect and participation idea generation. Findings from both the quantitative and qualitative sociological factor analyses were triangulated with the community college administrators' points of view on similar factors affecting students.

To inform our investigation into different aspects of research questions #1 and #2 regarding self-competency assessment and program effectiveness, we looked at comparisons of responses to different questions via crosstabs between a categorical and a continuous variable: 1) how the overall "self" aggregate mean changes by program attended, years since attendance, and current employment status; and 2) how LeaderShape program effectiveness changes by program attended and years since attendance. After reviewing the crosstabs, a one-way ANOVA was performed to determine statistical significance among the results. If the p-value was greater than 0.05 indicating significance, tests to confirm normality and homogeneity were conducted (Residuals v. Fitted, Normal Q-Q graphs, and the Levene test). If the data passed these tests, a pairwise comparison via Tukey HSD (honestly significant difference) determined which individual pairings showed statistical significance. For the comparison between two continuous variables, such as LeaderShape program effectiveness and overall "self" rating,

a Pearson correlation was first run and, if highly or moderately correlated, continued with a t-test for significance. Finally, to indicate if competencies within a competency group (for example, the four transformational leadership competencies) have statistically significant differences in self rating, thereby helping inform our research on to what extent and what order community college students demonstrate modern leadership competencies, a one-way ANOVA was used to determine significance.

Descriptive graphical analysis presents some of the aforementioned data in a consumable manner for our partner organization. To provide a comparison of different stakeholders' definitions of competencies necessary for students to develop as leaders (research questions #1 and #2), four data points were compared (side-by-side table-view comparison and summarization): 1) the descriptive statistics from the community college students' "good leader" assessment of the competency scales, 2) the mean scores from the competency data derived from the community college administrators interviews, 3) the competencies LeaderShape currently includes in their programming to demonstrate the degree of alignment across the groups, and 4) competencies the literature defined as best practices for student leadership development effectiveness. This comparison triangulated the leadership competencies deemed "important" across community college stakeholders, national leadership inventory "norms," our partner organization, and the literature, uncovering differences that may play into community college student leader development toward the modern leadership construct.

#### Interviews

All administrator interviews were recorded and their transcripts were used to create codes. We used an abductive coding process which values both inductive and deductive approaches to coding but mainly relies on the expertise, experience, and intuition of researchers (Wheeldon & Ahlberg, 2011). The coding process began after initially reviewing transcripts from four community college administrator interviews. Reviewing the administrator comments provided direction in creating inductive codes for the

interviews. We then examined the literature to determine deductive codes to use in coding the interviews. A few of the inductive codes we created were also found in literature, so their labels were changed to deductive.

The inductive and deductive codes were used to create a preliminary codebook with 12 color-coded themes that included examples from the literature for the deductive codes and examples from the interviews for the inductive codes. We then associated codes with respective themes. However, after reviewing the themes and codes, we determined the structure of our coding (putting one or two codes under numerous themes) was inefficient. We reviewed coding guidance from qualitative research sources (*Qualitative Research: Bridging the Conceptual, Theoretical, and Methodological* by Ravitch and Carl and *Fundamentals of Qualitative Research: A Practical Guide* by Bhattacharya) and revised the theme and code balance. We created three themes with multiple related codes housed under them. The three themes, each assigned a different color, and the number of codes related to them are:

- student outcomes of leadership development programs (deductive): five related codes;
- environmental factors, i.e., financial status, attendance status, etc. (deductive): four related
   codes; and
- leadership development programming at community colleges (deductive and inductive): six related codes.

Explanations and examples were added to each theme and its respective codes to create the final codebook (see Appendix F).

We each coded the same interview to check interrater reliability. After comparing our coding techniques, we agreed there were only small differences and the majority of our coding followed a similar pattern. We came to a resolution regarding areas where there were differences in our coding.

During the coding comparison process we realized there were a couple of codes where the wording in our explanations needed to be adjusted and/or clarified. Changes were made to these explanations and the codebook was finalized. We color-coded the transcripts based on our thematical analysis and comparison of administrator responses to the themes and codes in the codebook.

Finally, we tabulated the leadership competency statement rankings from the administrator card sorting exercises. Descriptive statistics were run first as categorical, Likert scale-based data (frequency and range) and then converted to continuous where means and standard deviations were devised (Appendix B, Table 5). The frequency and mean were used in a comparative visual analysis of the competencies important per other groups and constructs mentioned earlier (students, LeaderShape, and literature), indicating the competencies' relative importance to success as a leader.

### **Program Document Review**

For the program design data, we compared the pedagogical elements of the current

LeaderShape Institute program to elements of a high-quality leadership program as described in the

literature. There are seven elements of a high-quality leadership program: (a) consistently develops their

programs; (b) values of the program and institution align, there is a strong relationship between the two

entities; (c) a sound learning methodology; (d) a rich and supportive learning environment; (e) teaching

students why it is important to be a good leader; (f) objectives are clearly stated and described; and (g)

the program is based on well-defined theoretical orientations (Zimmerman-Oster and Burkhardt, 1999).

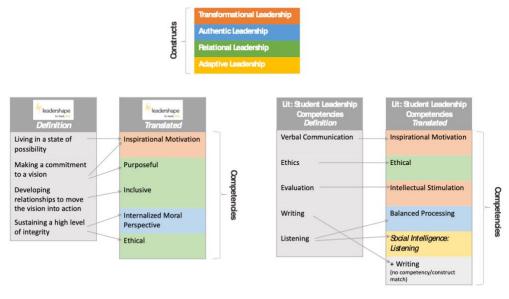
The full comparison of LeaderShape's Institute program against these elements, including notes of any

gaps, is presented in Appendix G.

To facilitate comparative analysis, we aligned LeaderShape's definition of leadership as stated in their 2022-2023 Program Guide (LeaderShape, 2022) with our modern leadership model and competencies (Figure 3). Their leadership definition guides overall program development, though

offerings have additional specific competency focuses. Similarly, we aligned Seemiller's (2013, 2019) student competencies model with our construct and competency definition (Figure 3).

**Figure 3**Translation of LeaderShape and Student Competencies Leadership Models to Constructs and Competencies



Individual Adaptive Leadership

## Historical Program Effectiveness Data

LeaderShape provided past survey data on their effectiveness question, "In general, LeaderShape was a valuable experience in developing my capacity to lead," which is answered by participants immediately after attending a LeaderShape session. Though LeaderShape collects this data each session, they have not in the past aggregated it for all community college participants. We aggregated the community college and 4-year institution data by program type and ran descriptive statistics: frequency (count and percentage), range, mean, and standard deviation. We then triangulated this data with the responses to this same question within our survey, characterizing a time-delay view of program effectiveness for community college students and insights into the difference institutional environments make as compared to 4-year institution students.

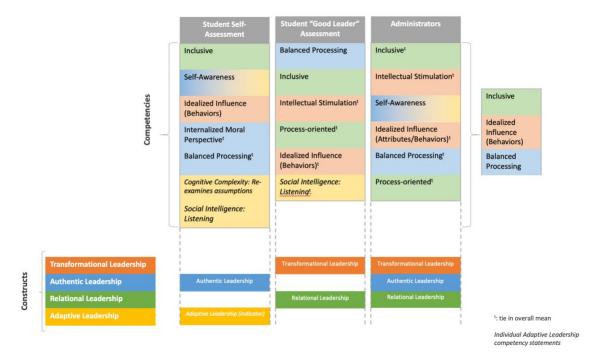
### **Findings and Recommendations**

Research Question #1: How do different community college stakeholders define competencies necessary for students to develop as leaders?

Finding #1, Stakeholder Competency Definition: Community college students that attended LeaderShape align themselves slightly more with an Authentic Leadership profile while students' image of a "good leader" and administrators reflect a more balanced modern leadership profile.

The means of leadership competencies, represented by scales within our student survey and statement items in our administrator interview protocol (found in Appendix B, Tables 3 and 5), were rank ordered to uncover the highest average scores. Figure 4 reveals the top five competencies for student self-assessment, student "good leader" assessment, and administrator estimation of importance, and with an overlay of which leadership constructs each competency represents. More than five items are listed due to ties in means and inclusion of Adaptive competencies represented by single, unscaled competency statements in italics; the latter displayed to show potential indication of the Adaptive construct without definitive inclusion since validated scales do not exist.

**Figure 4**Top Five Competencies Ranked by Students and Administrators with Alignment to Constructs



All three groupings (students' self-assessment, students' "good leader" assessment, and administrators) place importance on the individual competencies of Inclusive, Idealized Influence (Behaviors), and Balanced Processing, representing competency agreement points across community college stakeholders. Students place slightly more emphasis on an Authentic Leadership construct profile (via the competencies: Self-Awareness, Internalized Moral Perspective, and Balanced Processing) across their self-assessment while their assessment of a "good leader" and the administrators' collective view are increasingly distributed among Transformational, Relational, and Authentic constructs.

Students also place two Adaptive Leadership competency statements in their top five, however, since these are individual statements rather than scales due to the absence of a validated assessment, we note their inclusion but do not weigh them similarly to the scaled competencies (and administrators were not provided Adaptive competency statements given the lack of validated scales and the "one statement per competency" approach we used in their sorting exercise).

The more balanced modern leadership profile highlighted by administrators via the even mix of constructs in their top five is headlined by the competencies of Inclusive ("Respects the differences in others; values equity and involvement"; Relational Leadership) and Intellectual Stimulation ("Openness to new and different perspectives"; Transformational Leadership). When probed regarding the importance of these specific competencies, administrators mentioned that you cannot lead without listening to perspectives that are different than your own and learning about and respecting the differences in people.

Administrators shared thoughts on other characteristics necessary for student leadership development. For example, they relayed that feedback is needed when making decisions because as one expressed, "No decision should be made in a vacuum with only your thoughts and opinions" (administrator respondent, 2022). Even if the feedback provided is not used, it is as another administrator stated, "important to the team to know you asked for their feedback and listened to it" (administrator respondent, 2022). The importance of listening to others was consistently mentioned in the interviews as a skill that must be possessed to be a good leader, so much so that one administrator stated:

If you cannot silence your opinion in your brain long enough to listen to new and different perspectives that may not be your own...there's no way you can lead. A good leader is a good follower, and a good leader always has to mirror what they expect. (administrator respondent, 2022).

Administrators also put a high value on listening to others even when they disagree with you and finding mutual areas of an issue that can be agreed upon. In addition, they stated that it was of the utmost importance that leaders recognize and learn about the differences in people "and how that changes the dynamics of the group" (administrator respondent, 2022). Finally, leaders must go beyond

just learning about differences, they must respect them. If they do not respect differences it is, as one administrator put it, "a knock against you as a leader..." (administrator respondent, 2022).

Research Question #2: To what extent does the inclusion of various competencies and pedagogical elements in extra-curricular leadership development programs contribute to the development of community college students as leaders (including their leader identity)?

Finding #1, Pedagogical Element Inclusion: LeaderShape's Institute program meets the majority of the elements of a high-quality leadership development program.

Zimmerman-Oster and Burkhardt (1999) concluded that every student possesses leadership potential which can be developed through leadership programs and activities. These leadership programs should provide students with high quality learning which, according to research, consists of seven elements. We compared LeaderShape's Institute program (their flagship experience) to these seven elements to characterize the degree of agreement with these quality standards. The program met four of the seven elements: consistently develops their program, alignment between the values of the institution and the program with a strong relationship between the two entities, sound learning methodology, and rich and supportive learning environment. The three elements that they do not meet (according to the program information we had access to) are: teaching students why it is important to be a good leader, objectives are clearly stated and described, and a program based on well-defined theoretical orientations. The results of the comparisons are described below and further in Appendix G.

The first element they meet is being consistently involved in program development.

LeaderShape annually reviews and makes changes to the curriculum for all of their programs. The only time they have not followed this guideline is during the pandemic when they had no choice but to postpone the annual review.

The second element we compared is the alignment between an institution and LeaderShape's values. The literature states that there needs to be a strong relationship between the two entities in order for the program to be considered high-quality. From what was conveyed to us in the interviews

with community college administrators, the Institute program does align with the values of the institution. As one administrator stated:

...the partnership that we had with LeaderShape was so strong that we knew we always had someone that we could go to. We knew what to expect. We knew that they would have resources available for us. And I think just that, having that relationship for so many years with the same people, um, helped us to be successful. (administrator respondent, 2022)

In addition, the Institute program helps students identify their personal values then act in ways that are

consistent with them, become more self-aware and self-reflective, develop relationships, and become community oriented which were all valued by the organization.

A sound learning methodology is the third element of a high-quality leadership program that

LeaderShape meets. They have a set methodology that they use for each of their programs. However,
one administrator voiced concern regarding the use of the StarPower simulation with the community
college population. The administrator stated: "I really do think that the curriculum is sound, but I do
think [that] to be mindful of the population served by this..." (administrator respondent, 2022). For
example, "Those things that I've seen with StarPower in particular, have left students really in a bad
space, and so because it brings up so much. And now it's public for everybody to see, you know"
(administrator respondent, 2022). LeaderShape "needs to be prepared for the potential reactions, and
how they prepare for that is really...like doing what you're doing, talking to the people at the community
colleges and finding out what are the lived experiences of our students" (administrator respondent,
2022). Despite these concerns, the activities and simulations LeaderShape uses for Institute are
considered to be strong and well-established as they have been using them for years with great success.

In order for a leadership program to be high-quality it must provide the fourth element that LeaderShape meets which is a rich and supportive learning environment. This type of learning environment is created on the first day of Institute when students are asked to create a "Family

Cluster." A "Family Cluster" becomes their primary reference group throughout the 4-day program, offering each member feedback and support (LeaderShape, 2022). In addition to the reference group formed, one of the outcomes of Institute that is a focus of the 4-day event is "Develop relationships that honor the dignity of individuals and groups in the context of equity and social systems" (LeaderShape, 2022, p. 5). LeaderShape believes that relationships must be cultivated before a person can commit to a vision as they are a component of true leadership and the foundation of making a vision come to life (LeaderShape, 2022).

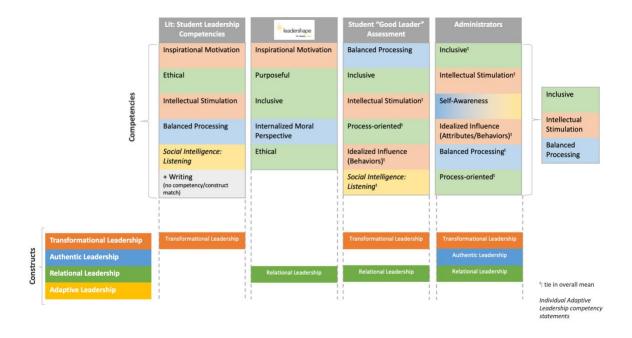
Although LeaderShape's program design explores what leadership means, the first element LeaderShape's program does not meet is teaching students why it is important to be a good leader in addition to assisting them in becoming leaders. Objectives of the program are clearly stated and described to participants is the second element of a high-quality leadership program that LeaderShape does not meet. On the first day of Institute the learning outcomes and purpose for the program are stated; however, the objectives of the daily activities that make up the program are not communicated or described to participants. The third element that LeaderShape does not meet is that the program should be based on well-defined theoretical orientations. Nothing in the program documentation indicates that Institute is based on theory. Although the DiSC instrument administered to students on the second day has been rigorously evaluated in terms of reliability and validity, per our review of available documentation, other parts of the program have not been assessed in such a manner.

Finding #2, LeaderShape Competency Alignment: LeaderShape's primary focus on the Relational Leadership (RL) construct syncs with community college students' desired leader identity profile ("good leader") and is confirmed by administrators.

We triangulated competencies and constructs presented in our modern leadership model across four focuses: literature (student leadership competencies model) (Seemiller, 2019), LeaderShape's philosophy and leadership definition, student ratings regarding exhibition frequency from a "good leader" (considered their "ideal" leader identity) from our survey, and administrators' estimation of

importance from our interviews (Figure 5). We, again, list the top five competencies for each group; where more than five items are listed it is due to ties in means and inclusion of Adaptive competency statements.

**Figure 5**Triangulation of Leadership Competencies and Constructs Across Groups



LeaderShape's leadership competencies represent Transformational, Authentic, and Relational Leadership competencies overall but have a heavy emphasis on Relational competencies (Purposeful, Inclusive, and Ethical). Within the students' top five competencies exhibited by a "good leader" overall, the two constructs with the most competencies are Relational Leadership and Transformational Leadership. Therefore, the construct of Relational Leadership imparted by LeaderShape's programming may be transferring into students' desired leader identity and this construct is also noted by administrators as important for student leadership development. The Relational Leadership (RL) competency of Inclusive matches across LeaderShape, students' desired identity, and administrators; however, other RL competencies mentioned by all groups largely differ.

Student leadership competencies from literature, denoted by prevalence of Level 1 college academic programs (defined by Seemiller, 2019, as: Diploma, Certificate, Associate Degree, Post-Associate Certificate, i.e., closest to community colleges) with these competencies and matched with critical workforce competencies, were also translated into competencies aligning to our definition of four modern leadership constructs. Transformational Leadership (TL) accounted for 40% of the prevalent competencies (one competency, Writing, was not translated as there are no close competency matches), and TL was also a construct floating to the top for both students' desired identity and administrators' assessment of importance. Interestingly, this is not a top overall construct for LeaderShape's programming, though on a competency level, literature and LeaderShape align on the TL competency of Inspirational Motivation. Administrators presented the most holistic approach and match to our modern leadership construct model and given their experience with student leadership programs and view into workforce needs, it may signal that LeaderShape's emphasis on Relational Leadership could inhibit a more well-rounded community college student identity.

Finally, at an overall competency level across all four focus groups, Inclusive (RL), Intellectual Stimulation (TL), and Balanced Processing (AL) surfaced as most mentioned, signaling alignment in their importance for inclusion, practice, and likely contribution to student identity. The latter two were missing only in LeaderShape's definition, presenting a potential opportunity for inclusion.

Finding #3, Student Leader Identity Strength: Community college students build a leader identity close to their "ideal" across modern leadership competencies though they may not be exhibiting these competencies at a high frequency yet.

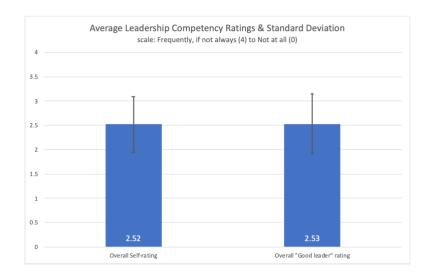
# Self-rating as a Measure of Identity.

Following our evaluation of the extent that various competencies included in programming match competencies that students and administrators rate as important to development of student leader identity, we now turn our focus to the degree to which our data found that LeaderShape may contribute to student identity. When comparatively looking at students' self-assessment and "good"

leader" (or "ideal" identity) aggregate means for frequency of exhibiting competencies, they rate their exhibition of leadership competencies as almost equal to someone they know that is a good leader (means/standard deviations: self: 2.52±0.57, "good leader": 2.53±0.62; presented in Figure 6). This comparative assessment is also highly correlated (Pearson correlation coefficient of 0.91). This indicates a strong leader identity since it is so close to someone they perceive as "ideal" – a good leader. Therefore, the "gap" we hypothesized existed in their leader identity is not present for our sample population.

Figure 6

Average Student Overall Competency Means and Standard Deviations: Self and "Good Leader"



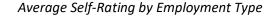
Students' average frequency of exhibiting these behaviors, however, lies between Sometimes (2) and Fairly Often (3), indicating that though they have a strong leader identity, they are not quite yet demonstrating leadership behaviors at a high frequency (though interestingly neither are the "good leaders" they focused on).

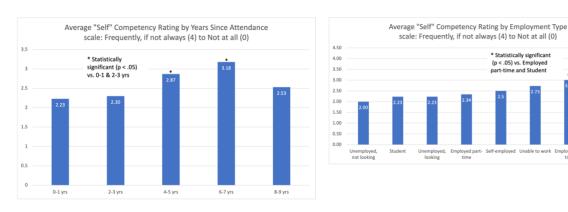
Finding #4, Obtained Identity Impacts: Community college students' current leader identity and perceived effectiveness of LeaderShape are impacted by time and LeaderShape program attended.

Students' self-assessment of competency frequency, and thus a measure of their self-identity, is impacted by the number of years since attending LeaderShape and their current employment status. ANOVA results show that students' average self-rating is higher 4-7 years after attending LeaderShape (statistically significant (p < .05) from 0-3 years out), peaks at 6-7 years after attendance, and then begins to decline (Figure 7). Students' average self-rating is higher (and statistically significant, p < .05) and firmly at a frequency of "Fairly often" for those employed full-time versus those employed part-time or still a student (Figure 8). Interestingly, being employed full-time is higher but not statistically significant than being unable to work (though the latter has a very low sample respectively).

Figure 7 Figure 8

Average Self-Rating by Years Since Attending LeaderShape





Both years since attending and full-time employment may signal a component of additional experience that boosts personal leader identity. We also were interested in the effect of LeaderShape program type on students' average self-rating and found that it does not significantly change per program attended.

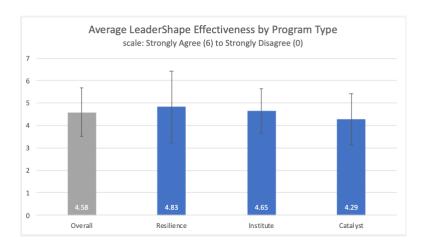
## Program Effectiveness as a Measure of Obtained Identity.

Another angle to building an identity is how a student perceives a program's effectiveness and impact on their leadership abilities. LeaderShape measures effectiveness and impact post-attendance via degree of agreement to the statement: "In general, LeaderShape was a valuable experience in developing my capacity to lead." In our survey, half (54%) of students strongly agree or agree with this statement. The average response was between Agree (5) and Somewhat agree (4) (range: 0 – Strongly disagree to 6 – Strongly agree).

LeaderShape program attended slightly impacts students' effectiveness ratings with Resilience rated somewhat higher, though not significantly different, in effectiveness than Institute or Catalyst (Figure 9).

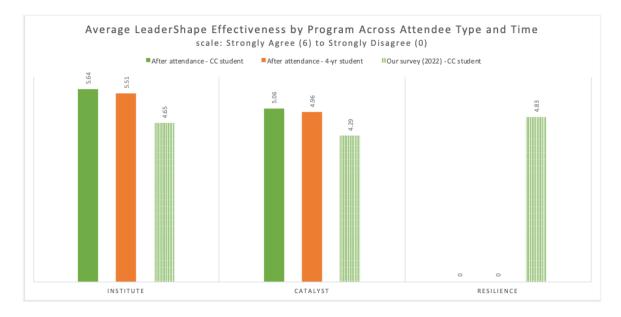
Figure 9

Average LeaderShape Effectiveness Rating by Program Type



We then compared LeaderShape's post-evaluation data to how respondents rated effectiveness in our survey and found that time moderates the relationship between the program attended and community college (CC) student effectiveness rating (Figure 10).

**Figure 10**LeaderShape Effectiveness Rating by Program Across Attendee Type and Time



Overall ratings (all attendee types) for Institute and Catalyst (no overall data for Resilience available from LeaderShape) are higher immediately after attending the course as compared to how students rate the program effectiveness today. Ratings for these same two programs immediately after attending LeaderShape are not materially different for type of attendee (community college vs. 4-year institution student).

# Program Contribution as a Measure of Obtained Identity.

Finally, we included a survey question to assess the perceived contribution of LeaderShape to students' current definition of themselves as a leader ("What percentage of how you define yourself as a leader today do you attribute to your LeaderShape experience?"). We found that students attribute, on average, approximately 2/3 of how they define themselves as a leader today to their LeaderShape experience and this attribution ranges from 43% to 88%.

Research Question #3: What is the relationship between community college environmental and sociological factors and perceived adoption and success of leadership programs?

Finding #1, Environmental Factor Impact: Lack of funding affects community colleges' ability to offer extracurricular activities including leadership programs.

Many community colleges have experienced a loss of state funding and now only receive funds from property taxes and fees and student tuition. Due to these losses, they cannot afford an appropriate number of staff members and do not have enough resources to implement leadership development programs or to make the ones that they do have the best that they could be. As one community college administrator stated, "Low staffing has hurt student life offices because we can't get students what they need from us" (administrator respondent, 2022).

In addition to several community colleges being cut from the state budget, there has also been a significant drop in enrollment after the pandemic. One administrator we interviewed provided detailed information about the funding issues their college is facing:

And then the pandemic comes in 2020 and that has impacted our enrollment. As you probably know, community colleges have been adversely impacted by the pandemic. Our college enrollment is down. Our specific college is down 26% from 2019; fall 2019 to fall 22 we were down 26% (from 8800 to 5200). Given the fact that the majority of our funds come from tuition, student fees, and we have a governing board that refuses to raise property taxes further... (administrator respondent, 2022)

These colleges are at a financial standstill and it is affecting students in a significant way.

The administrators we interviewed expressed that LeaderShape itself is not an expensive program; however, the required expenditures for the college to hold Institute make affording the program nearly impossible. An administrator who worked with LeaderShape for several years stated:

Money is always a challenge. But it's not actually the program [LeaderShape] itself that is the concern or the user expense. It's the housing. It's feeding and housing people for a week, 70 plus

people for a week at a community college budget that's a challenge. (administrator respondent, 2022)

LeaderShape's other programs, Catalyst and Resilience, are more manageable in regard to the amount of funds the college expends to conduct them and the sociological factors that community college students face.

Finding #2, Sociological Factor Impact: Sociological factors can negatively impact student engagement in leadership programs; however, the degree of perceived impact differs between administrators and students with administrators taking a stronger view.

### Administrator View.

Administrators perceive that many of the students who attend community college have so many obligations outside of school they cannot participate in extracurricular activities such as leadership development programs. Administrators have a hard time getting students to commit to being involved in leadership development programming because of their commitments outside of school, i.e., family obligations, work, taking care of elderly parents, etc.

The community college population is primarily comprised of post-traditional students. As one administrator we interviewed stated:

...it's just the population of students we serve. So many of them have so many more obligations outside of school that do not allow them the time to focus on their own leadership development. When we have parents and students that are taking care of families who are working multiple jobs...their schedules are very tight where they know what time they have to come to class then they have to leave right away to get to their next job... (administrator respondent, 2022)

The majority of the students at community colleges are trying to gain the knowledge they need for selfimprovement so they can focus on having the career they desire and create a better life for themselves and their families. The administrators we interviewed recognized the multiple responsibilities of their students; for example, when asked about what impacts student engagement in extracurricular activities an administrator stated:

...our students are managing all sorts of life circumstances. A lot of them are caregivers [to elderly parents]. A lot of them are working. A lot of them have other responsibilities and are working multiple jobs and are attempting to go to school to get... to not have to work so many jobs, right? So, they come to school, they learn what they need to learn, then they leave, and they go do their life. (administrator respondent, 2022)

According to administrators, many students would like to attend leadership development programs but cannot overcome the barriers that prevent their participation. This is particularly true of LeaderShape's Institute program where students spend four days immersed in the program. Students find it very difficult to participate in Institute because as one administrator expressed:

...the commitment of the students to have to spend a week at an institute that, um, that is a huge barrier for them...trying to figure out if students would be able to forgo work or time with their family for that amount of time right. So that was a barrier. (administrator respondent, 2022)

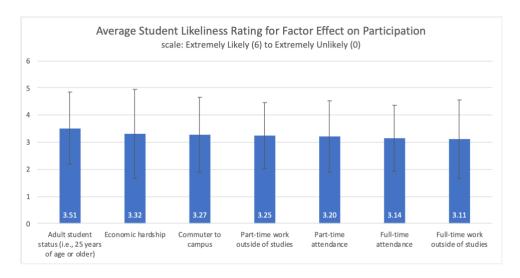
These barriers must be taken into consideration when planning leadership development programs and other extracurricular activities for students at community colleges.

#### Student View.

Community college students rate the likeliness that seven sociological factors might affect participation in extra-curricular leadership development programs like LeaderShape, on average, between Neither Likely nor Unlikely (3) and Slightly Likely (4), and closer to the former (aggregate mean/standard deviation: 3.28±1.10, Figure 11). These factors are moderately to highly correlated with one another (Pearson, correlation coefficients between 0.48 and 0.65). The neutral likeliness rating is surprising given what we know from the literature and administrators about the impact of sociological

factors on the community college experience. In hindsight, however, these respondents were able to participate in LeaderShape, despite any obstacles, and thus may tend toward rating the factors with a lower impact.

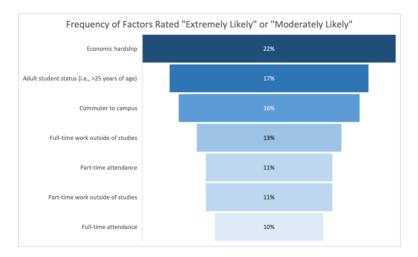
**Figure 11**Average Student Likeliness Rating Across Sociological Factors



When looking at the frequency of factors at the more likely end of the scale, economic hardship is the factor most cited as Extremely Likely or Moderately Likely to affect participation (22%), followed by being a student >25 years old (17%), and being a commuter (16%) (Figure 12).

Figure 12

Sociological Factors Rated by Students as Extremely or Moderately Likely to Affect Participation



When asked why characteristics like these might affect participation, some students noted that stresses about time and money may prohibit focus on extra-curricular activities: "If a student is stressed about time or money, they are typically going to have their blinders on and less likely to even consider extra-curricular activities, even if those activities may be helpful for them and their development" (student respondent, 2022). Though a need to work full or part-time outside of school did not surface in the top three factors most likely to affect participation, for some it is related to economic hardship in that it is a resulting activity necessary to remedy economic stress. Another factor mentioned most likely to impact participation was age with some students feeling that students 25 years of age or older may be too occupied or not feel connected to the younger population they may be participating with.

When asked about their thoughts on ways to make participation more likely for students experiencing these factors, students called for alternate approaches such as different methodologies (online, text), different timing (weekend or evening options for any program and allowing students with children or work commitments to leave at night and come back in the morning for the residential Institute program), or community college student-dedicated sessions so participants can be around those who are like-minded and come from similar situations.

### Recommendations

The overarching theme for our recommendations centers around a more targeted and focused effort to meet community college stakeholders at their points of need and unique situational characteristics around student leadership development.

## The Community College Program Approach

Recommendation: LeaderShape should seek adjusted programming approaches for community colleges to meet unique sociologic and environmental needs for this population or find ways to mitigate these factors within program design.

Option: Create and market a hybrid Resilience / Catalyst program which addresses time, fiscal,
 and sociological constraints without sacrificing leadership content quality.

Our survey results find that Resilience was rated slightly higher by students over Institute or Catalyst. Though the percentage of the sample that attended Resilience was low (10%), it is worth noting that it generated a higher effectiveness score among this population as it is comprised of three 1-hour asynchronous online modules, effectively meeting community college time and fiscal needs. Our recommendation is to pair the balanced construct content of Catalyst with desired Resilience program structure components, particularly online engagement, for a more targeted approach for this population. Our concern with recommending only Resilience for community college students is in its fairly singular Adaptive Leadership focus. We wonder if, long-term, the absence of other modern leadership constructs may contribute to a more muted leadership identity. The act of looking for synergies from both programs may also generate additional insight for LeaderShape into why Catalyst is rated lower in effectiveness and stimulate changes in that program that benefit it, and every participant, overall. Finally, this recommendation would be less time and resource intensive for LeaderShape versus creating an entirely new program from scratch.

Community college stakeholders expressed the desire to develop students as leaders and provided situational context as to why that can be a challenge in the community college environment. In terms of time, community college students that attended LeaderShape expressed sociological factors that lead to activities, such as the need to work full or part-time, that may inhibit full participation in a longer, residential program like LeaderShape's 4-day flagship program, Institute. Literature supports this concern with 67% of 2-year public institution students working full or part-time versus 58% for 4-year students and a bigger differential between 2-year and 4-year students working full-time specifically (32% versus 17% respectively) (Campbell & Wescott, 2019). Four-year institutions are the targeted institution type for the Institute program and, given these statistics, there may be less of a time constraint for them to attend. Catalyst and Resilience can be completed in one day or less, mitigating the factor of time.

Regarding fiscal measures, from the perspective of the community college itself, a lack of state funding combined with a decrease in enrollment after the pandemic is an issue that is difficult for the colleges to overcome. These fiscal issues have led to low staffing and an inability to pay for the resources required to conduct leadership programs such as Institute. Catalyst and Resilience are more cost effective for community colleges because they do not require the same expenses as Institute. From a student perspective, economic hardship was mentioned most frequently as extremely or moderately likely to affect participation in extra-curricular activities. Though the cost of LeaderShape, regardless of the program, is borne by the institution, the community college student may still experience economic stress in attending a multi-day program like Institute via missed work time or having to utilize childcare, two situations mentioned by students in our survey. Some students also mentioned approaches that LeaderShape could adopt to mitigate time and fiscal concerns, namely: different methodology (online, text) or different timing (weekends/evenings).

• Alternative: Seek community college-supportive structural and/or process changes for Institute.

Knowing that Institute is LeaderShape's flagship program, with significant development and years of refinement plus the opportunity for higher revenue for LeaderShape, should LeaderShape wish to continue to market Institute to community colleges, we recommend allowing for more flexibility in program structure to better meet community college time and fiscal needs. From a student sociological factor perspective, we suggest considering a shift in the attendance policy, for example, as one student mentioned in our survey, allowing students with children or work commitments to leave at night and come back in the morning. Changing the attendance process would be beneficial from the institution's fiscal perspective as well. The college could lower their cost of conducting the program by having all students leave at the end of the day and come back the next instead of paying to house them for the duration of the program. The college could then offer these students a stipend for gas to help with the expense of traveling each day. Also, since the students would not be spending the night on-site the college could save additional money by providing a reduced number of meals.

# **Program Content Alignment**

Recommendation - Alignment of Leadership Competencies: To more closely align with community college stakeholder expectations, we recommend further development of program objectives and content to balance modern leadership constructs and competencies.

The first part of our recommendation is recognition of a best practice LeaderShape is employing and encouragement for them to continue: infusion of the Inclusive leadership competency in their program objectives and elements. Literature points to the increasing importance of inclusion as a leadership competency for college students (Komives et al., 2013; Seemiller, 2013). Additionally, this was supported by our research as community college students that attended LeaderShape rated their own and a "good leader's" frequency of exhibiting this behavior as most or next highest. In addition, community college administrators rated it as the most important competency for student development.

To enhance the match with modern leadership theory and community college administrator expectations, we also recommend infusing content around Intellectual Stimulation (Transformational Leadership) and Balanced Processing (Authentic Leadership). These competencies are a component of the student leadership competencies mentioned as best practices from literature (Seemiller, 2019) and by community college stakeholders regarding importance; however, they are missing from LeaderShape's definition of leadership. In addition, Intellectual Stimulation, in Seemiller's (2019) definition of "Evaluation, Learning and Reasoning" before translation into our construct, is also noted as a critical workforce leadership competency. An example of how Intellectual Stimulation and Balanced Processing might be reflected in LeaderShape content is through reinforcement of problem solving through seeking differing perspectives.

Finally, though the Adaptive Leadership construct did not have a validated scale for its respective competencies, inclusion of adaptive leadership statements in the survey allowed us to get a read on suitability. Seemiller's (2019) student leadership competencies and students' estimation of a "good leader" both included the Adaptive Leadership competency of "Social Intelligence: Listening" as important and thus may be worth further investigation by LeaderShape as to the potential benefits for inclusion.

Recommendation – Pedagogical Theoretical Orientations: LeaderShape should include the theoretical orientations for program activities and simulations in their promotional and informational content.

Our recommendation addresses one of the elements of a high-quality leadership program that LeaderShape's Institute programs did not meet, which was being based on well-defined theoretical orientations. We suspect that LeaderShape's program does meet this element, however they do not advertise this information when providing information about the programs. For example, the DiSC instrument used to assess students' personalities on the second day has been thoroughly evaluated and is reliable and valid; however, this information is not provided to clients or participants. The theoretical

orientations of the other LeaderShape activities/simulations, such as Star Power and Earthquake, are not mentioned or addressed in any of LeaderShape's documents. Therefore, we strongly suggest that LeaderShape conducts their own research regarding the theoretical orientations of their activities and simulations used in each of their programs. This information will give credibility to their leadership development programs and change and improve the way they promote their program, strengthening their proposal to partner with the institution.

#### Limitations

In terms of study limitations, first, the community college student population in our study already attended a leadership development program. Given their experience, responses may be skewed to project a stronger leader identity and more muted impact of sociological factors than students that have not attended a program. External validity, at least to the general community college student populations at the institutions attended by our survey populations, should be confirmed through a future study or survey with paired comparison of leadership program attendees and non-attendees from the same institution to characterize any differences.

Second, without a comparison to LeaderShape attendees from 4-year institutions, our recommendations to the organization represent planning for a separate set of program elements or structures which adds complexity to their program model. Comparing to 4-year institution attendees may reveal areas that are consistent across attendee type, thus promoting solutions that apply to all, or areas that have a significant difference, thus confirming the necessity for alternate program aspects for community college students.

Third, we only have self-ratings for community college students in our study. The Dunning-Kruger Effect posits that an individual may be somewhat unaware of their true competence (or not have the right level of confidence about their competence), and thus, self-rating may be underestimated or overestimated and might benefit from an objective external view (The Decision Lab, 2023). Therefore,

our study's focus on the view of self without triangulation to an external observer's rating of the same characteristics surfaces a gap in corroboration of the degree respondents actually exhibit competencies in their work or extra-curricular activities and the potential impact it may have on those organizations.

Last, our study would have benefitted from an administrator sample that included more who worked directly with LeaderShape. Only two of the eight administrators we interviewed had worked directly with LeaderShape. It would have been beneficial to get the perspectives from more administrators who worked with LeaderShape to get a broader scope of the experiences various colleges have had with them in terms of programming, environmental, and sociological factors.

### Conclusion

This capstone supported LeaderShape, a non-profit organization that provides student leadership development programs, in their strategic expansion to the community college population. Our study sought to uncover community college stakeholder (students and administrators) views on student leader identity, appropriate program characteristics, and potential environmental and sociological constraints to program adoption in order to provide targeted program recommendations. Literature on community college student leadership development is scarce so our theoretical and conceptual framework focused on three angles: modern leadership theory bounded by four leadership constructs, identity theory and its relation to student leader identity, and student leadership development research and best practices. The community college context, including external, sociological, and environmental factors impacting stakeholders, underpins these angles.

With a goal of uncovering community college stakeholder perceptions and insights, our questions focused on characterizing student leader competency definition and identity, contribution of competencies and program elements to student leader development, and the community college context impact on program adoption and success. A mixed-methods approach generated breadth via a survey instrument to collect perceived identity and sociological factor impact from students and depth

from administrator semi-structured interviews, a program document review, and historical program effectiveness data.

Data analysis revealed key findings around our questions, such as:

- Community college students that attended LeaderShape build a leader identity close to their image of and "ideal" leader across leadership competencies though construct coverage differs between LeaderShape and community college stakeholders.
- 2. At least one of LeaderShape's programs meets the majority of the elements of a highquality leadership development program.
- Environmental (e.g. funding) and sociological factors (e.g. economic hardship) can negatively impact student engagement in leadership programs or the ability to deliver them.

Given these findings, our recommendations focus on adjusted content and structural programming approaches to meet community colleges' unique sociological, environmental, and student identity needs.

In conclusion, this research provides LeaderShape with a starting point to speak to specific community college stakeholder needs regarding student leadership development. This may lead to increased engagements with community colleges, both supporting LeaderShape's realization of their strategic goal and, importantly, building leadership potential in community college students, a key population that is often overlooked.

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#### **Appendix A: Survey Instrument**

Note: Per contract with the inventory provider, individual competency scale items except for one example are redacted given their intellectual property.

Leadership Competencies and the Community College Experience (in conjunction with LeaderShape)

#### Intro



Welcome! Our project is interested in your perceptions regarding leadership and identity development. As a former participant of LeaderShape while attending community college, you have been specifically selected to provide your perspective.

You will be asked to answer some questions relevant to leadership competencies and the impact of community college experience factors on participation in leadership development programs. Your responses will be kept completely confidential.

The survey should take around 15 minutes to complete. Your participation in this project is voluntary and you have the right to withdraw at any point. For your participation and completion of the survey, you are eligible to be entered into a drawing for **one of two \$50 Amazon.com e-gift cards**.

The Principal Investigators of this project can be contacted at <a href="mailto:sharon.m.gloyer@vanderbilt.edu">sharon.m.gloyer@vanderbilt.edu</a> or <a href="mailto:tammy.mattison@vanderbilt.edu">tammy.mattison@vanderbilt.edu</a>.

By selecting the option below to proceed, you acknowledge:

- Your participation in the project is voluntary.
- · You are 18 years of age or older.
- You are aware that you may choose to terminate your participation at any time for any reason.

| $\cup$ | 1 | agree, | begin | me | survey |
|--------|---|--------|-------|----|--------|
|        |   |        |       |    |        |

O I do not agree; I do not wish to participate

#### LeaderShape Experience

The following questions relate to your LeaderShape experience and the extent to which it shapes your identity as a leader today. Please indicate your answers by selecting the appropriate responses.

|         | eaderShape program did you attend?  |
|---------|---|
| 0       | lyst  |
| $\circ$ | rageous Dialogue  |
| 0       | tute  |
| 0       | lience  |
| Whi     | community college did you attend while participating in LeaderShape?  |
| Whi     | community college did you attend while participating in LeaderShape?  |
| Whi     | community college did you attend while participating in LeaderShape?  |
|         |   |
|         | community college did you attend while participating in LeaderShape?  any years has it been since you attended LeaderShape? |

| _ 2-3   |   |  |                          |  |   |  |   |  |  |
|---|---|--|--------------------------|--|---|--|---|--|--|
| ☐ 4-5   |   |  |                          |  |   |  |   |  |  |
| □ 6-7   |   |  |                          |  |   |  |   |  |  |
| 8-9   |   |  |                          |  |   |  |   |  |  |
| □ 10+   |   |  |                          |  |   |  |   |  |  |
| In general, Leade<br>Strongly disagree  | erShape was a   | a valuable<br>Some<br>disag  | what                     | ience in develo<br>Neither agree<br>disagree   |   |  | lead.   | ee                                     | Strongly agree   |
| 0   | 0   | C  |                          | 0  | 0   |  |   | )                                      | 0  |
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|   | self as a   |  |                          |  |   |  |   |  |  |
| ndership Compe  |   |  |                          |  |   |  |   |  |  |
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| In this section, we answers by select Thinking about so that you consider Judge how frequences the following always (4) | tencies  e would like to ting your des  meone you k to be a good ently each sta rating scale: | ired responsion person leader, de leader, de stement fits Not at all (   | onally (escribe the p    | (i.e., teacher, see the leadersherson you are noce in a while (o not know the                          | upervisor, ad ip style of the describing.  1), Sometime answer, leaves Sometime             | ivisor, n<br>his indi<br>es (2), F<br>ve the a | nentor, favidual a                                | amily ras you en (3), lank. often      | requently, if not always                               |
| In this section, we answers by select thinking about so that you consider Judge how frequences the following always (4) | tencies  e would like to ting your des  meone you k to be a good ently each sta rating scale: | ired respondence in the control of t | onally (escribe the p    | (i.e., teacher, see the leadersherson you are noce in a while (on not know the Once in a while         | upervisor, ad ip style of the describing.  1), Sometime answer, leav Sometime               | ivisor, n<br>his indi<br>es (2), F<br>ve the a | nentor, favidual a                                | amily rouses you                       | rember, etc.)  perceive it.  Frequently, if not always |

| Not at all | Once in a while | Sometimes | Fairly often | Frequently, if not always    |
|------------|-----------------|-----------|--------------|------------------------------|
| 0          | 0               | 0         | 0            | 0                            |
|            |                 | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| Not at all | Once in a while | Sometimes | Fairly often | Frequently, if not<br>always |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| Not at all | Once in a while | Sometimes | Fairly often | Frequently, if not<br>always |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
|            | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| Not at all | Once in a while | Sometimes | Fairly often | Frequently, if not<br>always |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
| 0          | 0               | 0         | 0            | 0                            |
|            | -               | _         | _            | _                            |

|   | Not at all          | Once in a while          | Sometimes              | Fairly often      | Frequently, if no<br>always |
|---|---------------------|--------------------------|------------------------|-------------------|-----------------------------|
| Talks optimistically about the future                       | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | © 1995 Bruce Avolid | and Bernard Bass. All re | ghts reserved in all m | edia.             |                             |
| Thinking about y <u>ourself,</u> <b>des</b>                 |                     | y Mind Garden, Inc., www |                        | idaa how fragus   | ently each                  |
| statement fits you. The word reports, supervisors, and/or a | "others" may me     | ean your peers (inc      |                        |                   |                             |
| Use the following rating scale                              |                     |                          | Sometimes (2),         | Fairly often (3), | Frequently, if r            |
| always (4)<br>If an item is irrelevant, or if yo            | ou are unsure or    | do not know the a        | nswer. leave the       | answer blank.     |                             |
| · · · · · · · · · · · · · · · · · · ·                       | Not at all          | Once in a while          | Sometimes              | Fairly often      | Frequently, if n            |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | Not at all          | Once in a while          | Sometimes              | Fairly often      | Frequently, if n<br>always  |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   | 0                   | 0                        | 0                      | 0                 | 0                           |
|   |                     |                          |                        |                   |                             |

|  | Not at al          | I Once in a                               | while                | Sometimes                         | Fairly of          |                   | quently, if not<br>always |  |  |
|--|--------------------|---|----------------------|-----------------------------------|--------------------|-------------------|---------------------------|--|--|
|  | Not at al          | I Once in a                               | while                | Sometimes                         | Fairly of          |                   | quently, if not always    |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | $\circ$                           | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | $\circ$                           | 0                  |                   | 0                         |  |  |
|  | Not at al          | I Once in a                               | while                | Sometimes                         | Fairly of          |                   | quently, if not<br>always |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | $\circ$                           | 0                  |                   | 0                         |  |  |
| I talk optimistically about the<br>future  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  | 0                  | 0   |                      | 0                                 | 0                  |                   | 0                         |  |  |
|  |                    | volio and Bernard B<br>ed by Mind Garden, |                      |                                   | media.             |                   |                           |  |  |
| Characteristics of the commu   | nity college       | experience                                |                      |                                   |                    |                   |                           |  |  |
| The following describes selected characteristics of the community college student experience. Whether they applied to your experience or not, please indicate the degree of likeliness you believe each might affect student participation in extra-curricular leadership development programs like LeaderShape. Please indicate your answers by selecting your desired responses. Note, some questions may lead to others depending on your response. |                    |   |                      |                                   |                    |                   |                           |  |  |
|  | Extremely unlikely |   | Slightly<br>unlikely | Neither<br>likely nor<br>unlikely | Slightly<br>likely | Moderately likely | Extremely likely          |  |  |
| Commuter to campus   | 0                  | 0   | 0                    | 0                                 | 0                  | 0                 | 0                         |  |  |
| Full-time attendance   | 0                  | 0   | 0                    | 0                                 | 0                  | 0                 | 0                         |  |  |
| Part-time attendance   | 0                  | 0   | 0                    | 0                                 | 0                  | 0                 | 0                         |  |  |

|  | Extremely unlikely | Moderately<br>unlikely | Slightly<br>unlikely | Neither<br>likely nor<br>unlikely | Slightly<br>likely | Moderately<br>likely | Extremely likely |
|--|--------------------|------------------------|----------------------|-----------------------------------|--------------------|----------------------|------------------|
| Engaging in full-time work<br>outside of studies   | 0                  | 0                      | 0                    | 0                                 | 0                  | 0                    | 0                |
| Engaging in part-time work<br>outside of studies   | 0                  | 0                      | 0                    | 0                                 | 0                  | 0                    | 0                |
| Adult student status (i.e., 25 years of age or older)  | 0                  | 0                      | 0                    | 0                                 | 0                  | 0                    | 0                |
| Students facing economic<br>hardship   | 0                  | 0                      | 0                    | 0                                 | 0                  | 0                    | 0                |
| Please describe your thoug<br>affect participation for comm  |                    |                        | tics you rat         | ed 'Extremel                      | y likely' or '     | Moderately lik       | kely' migh       |
| factor(s)?   |                    | -                      |                      |                                   |                    |                      |                  |
|  |                    |                        |                      |                                   |                    |                      |                  |
| nographics   |                    |                        |                      |                                   |                    |                      |                  |
| n this section, we would lik<br>different types of people. Pl  | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| n this section, we would lik<br>different types of people. Pl<br>questions may lead to other   | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| In this section, we would lik<br>different types of people. Pl<br>questions may lead to other  | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| In this section, we would lik<br>different types of people. Pl<br>questions may lead to other  | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| In this section, we would lik<br>different types of people. Pl<br>questions may lead to other<br>Gender<br>Female  | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| ○ Male   | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| In this section, we would lik different types of people. Pl questions may lead to other Gender Female Male Non-binary / third gender                         | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |
| In this section, we would lik different types of people. Pl questions may lead to other Gender Female Male Non-binary / third gender Prefer to self-describe | ease indicate      | your answer            | s by selecti         |                                   |                    |                      |                  |

| Asian  |                         |
|--|-------------------------|
| Black or African American                              | Prefer to self-describe |
| Native Hawaiian or Other Pacific Islander              | Prefer not to say       |
| White  | Of folial flot to say   |
| VALIE  |                         |
|  |                         |
| Are you of Hispanic, Latino/a/x, or of Spanish origin? |                         |
| ○ Yes  |                         |
| O No   |                         |
| Some other race, ethnicity, or origin                  |                         |
| O Prefer to self-describe                              |                         |
| Prefer not to say                                      |                         |
| ,  |                         |
|  |                         |
| Did you complete your studies at a community colleg    | e?                      |
| ○ Yes  |                         |
| O No   |                         |
| Still attending community college                      |                         |
|  |                         |
| How many years did you attend community college?       |                         |
| O 0  |                         |
| O 1  |                         |
| ○ 2  |                         |
| ○ 3  |                         |
| O 4+   |                         |
|  |                         |
| Did you transfer from community college to a 4-year    | college or university?  |
| ○ Yes  |                         |
| ○ No   |                         |
| Not yet, I'm still a community college student         |                         |
|  |                         |
| How many years did you attend a 4-year college or u    | iniversity?             |
| o  | illiverouy:             |
| 01   |                         |
| 0 2  |                         |
| _  |                         |
| O 3  |                         |
| O 4+   |                         |

| Did you graduate from a 4-year college or university?  |
|--|
| ○ Yes  |
| ○ No   |
| Not yet, I'm still attending a 4-year college or university  |
|  |
| What was your residential status through the majority of your community college experience?  |
| ○ Lived on-campus  |
| Lived off-campus and commuted to college   |
|  |
| What is your current employment status? Please select all that apply.  |
| Employed full-time (40 or more hours per week)   |
| Employed part-time (up to 39 hours per week)   |
| Unemployed and currently looking for work  |
| Unemployed and not currently looking for work  |
| Student  |
| Self-employed  |
| Unable to work   |
| Other  |
| O Suite  |
|  |
| What was your employment status through the majority of your community college experience?   |
| Employed full-time (40 or more hours per week)   |
| Employed part-time (up to 39 hours per week)   |
| Unemployed and currently looking for work  |
| Unemployed and not currently looking for work  |
| Student  |
| Self-employed  |
| Unable to work   |
| Other  |
| O SUIG   |
|  |
| What was your attendance status through the majority of your community college experience?   |
| Attended full-time   |
| ○ Attended part-time   |
|  |
|  |
| Did you experience economic hardship (difficulty caused by having too little money or too few resources) during your community college experience? |
| ○ Yes  |
|  |
|  |
| ○ No   |
| O Prefer not to say  |
|  |
| Closing/Link to Drawing  |
|  |
| We thank you for your time spent taking this survey and contributing to our project! Would you like to enter the                                   |
| drawing for one of two \$50 Amazon.com e-gift cards? Your response will still remain anonymous.  |
| ○ Yes  |
| ○ No   |

# **Appendix B: Descriptive Statistics Tables**

Table B1: Descriptive Statistics of LeaderShape question data

| Measure              | Range (Likert)        | n                      | %                     | Mean + SD          |
|----------------------|-----------------------|------------------------|-----------------------|--------------------|
| LeaderShape Progra   | m Attended (n=57)     | •                      | •                     | •                  |
| Catalyst             |                       | 14                     | 24.6                  |                    |
| Institute            |                       | 37                     | 64.9                  |                    |
| Resilience           |                       | 6                      | 10.5                  |                    |
| Years since attended | d LeaderShape (n=57   | )                      |                       |                    |
| 0-1                  |                       | 11                     | 19.3                  |                    |
| 2-3                  |                       | 26                     | 45.6                  |                    |
| 4-5                  |                       | 9                      | 15.8                  |                    |
| 6-7                  |                       | 8                      | 14.0                  |                    |
| 8-9                  |                       | 3                      | 5.3                   |                    |
| Program Effectivene  | ss question: "In gene | eral, LeaderShape w    | as a valuable experie | ence in developing |
| my capacity to lead. | " (n=57)              |                        |                       |                    |
| Strongly agree       | 7-point Likert        | 13                     | 22.8                  | 4.58±1.08          |
| Agree                | scale: Strongly       | 18                     | 31.6                  |                    |
| Somewhat agree       | agree (6) to          | 17                     | 29.8                  |                    |
| Neither agree nor    | Strongly disagree     | 7                      | 12.3                  |                    |
| disagree             | (0)                   |                        |                       |                    |
| Somewhat disagree    |                       | 2                      | 3.5                   |                    |
| Disagree             |                       | 0                      | 0                     |                    |
| Strongly disagree    |                       | 0                      | 0                     |                    |
| Percentage attribute | LeaderShape to how    | w define self as a lea | der today (n=57)      |                    |
|                      |                       |                        |                       | 65.44±22.04        |

# Table B2: Descriptive Statistics for Likeliness Certain Factors of Community College Experience Might Affect Participation

• 7-point Likert scale (range: Extremely likely (6) to Extremely unlikely (0))

| Factor/<br>Stat | Extremely<br>Likely | Moderately<br>Likely | Slightly<br>Likely | Neither<br>likely<br>nor<br>unlikely | Slightly<br>Unlikely | Moderately<br>Unlikely | Extremely<br>Unlikely |
|-----------------|---------------------|----------------------|--------------------|--------------------------------------|----------------------|------------------------|-----------------------|
| Commute         | er to campus        | (N=55)               |                    |                                      |                      |                        |                       |
| n               | 5                   | 5                    | 14                 | 10                                   | 18                   | 3                      | 0                     |
| %*              | 9.1                 | 9.1                  | 25.5               | 18.2                                 | 32.7                 | 5.5                    | 0                     |
| mean +          | 3.27±1.39           |                      |                    |                                      |                      |                        |                       |
| sd              |                     |                      |                    |                                      |                      |                        |                       |
| Full-time       | attendance (        | N=54)                |                    |                                      |                      |                        |                       |
| n               | 2                   | 4                    | 13                 | 22                                   | 8                    | 4                      | 1                     |
| %               | 3.7                 | 7.4                  | 24.1               | 40.7                                 | 14.8                 | 7.4                    | 1.9                   |
| mean +          | 3.14±1.22           |                      |                    |                                      |                      |                        |                       |
| sd              |                     |                      |                    |                                      |                      |                        |                       |

| Part-time | Part-time attendance (N=55)              |                 |              |          |      |      |     |  |  |  |  |
|-----------|--|-----------------|--------------|----------|------|------|-----|--|--|--|--|
| n         | 3  | 4               | 17           | 14       | 12   | 4    | 1   |  |  |  |  |
| %*        | 5.5                                      | 7.3             | 30.9         | 25.5     | 21.8 | 7.3  | 1.8 |  |  |  |  |
| mean +    | 3.20±1.32                                |                 |              |          |      |      |     |  |  |  |  |
| sd        |  |                 |              |          |      |      |     |  |  |  |  |
| Full-time | Full-time work outside of studies (N=55) |                 |              |          |      |      |     |  |  |  |  |
| n         | 5  | 3               | 11           | 18       | 12   | 4    | 2   |  |  |  |  |
| %         | 9.1                                      | 5.5             | 20.0         | 32.7     | 21.8 | 7.3  | 3.6 |  |  |  |  |
| mean +    | 3.11±1.45                                |                 |              |          |      |      |     |  |  |  |  |
| sd        |  |                 |              |          |      |      |     |  |  |  |  |
| Part-time | work outside                             | of studies (N=  | 55)          |          |      |      |     |  |  |  |  |
| n         | 3  | 4               | 16           | 16       | 13   | 3    | 0   |  |  |  |  |
| %*        | 5.5                                      | 7.3             | 29.1         | 29.1     | 23.6 | 5.5  | 0   |  |  |  |  |
| mean +    | 3.25±1.22                                |                 |              |          |      |      |     |  |  |  |  |
| sd        |  |                 |              |          |      |      |     |  |  |  |  |
| Adult stu | dent status (i.                          | e., 25 years of | age or older | ) (N=56) |      |      |     |  |  |  |  |
| n         | 5  | 6               | 19           | 12       | 12   | 1    | 1   |  |  |  |  |
| %*        | 8.9                                      | 10.7            | 33.9         | 21.4     | 21.4 | 1.8  | 1.8 |  |  |  |  |
| mean +    | 3.51±1.33                                |                 |              |          |      |      |     |  |  |  |  |
| sd        |  |                 |              |          |      |      |     |  |  |  |  |
| Economic  | : hardship (N=                           | 56)             |              |          |      |      |     |  |  |  |  |
| n         | 7  | 7               | 11           | 14       | 7    | 9    | 1   |  |  |  |  |
| %         | 12.5                                     | 12.5            | 19.6         | 25.0     | 12.5 | 16.1 | 1.8 |  |  |  |  |
| mean +    | 3.32±1.64                                |                 |              |          |      |      |     |  |  |  |  |
| sd        |  |                 |              |          |      |      |     |  |  |  |  |

<sup>\*</sup> Percentage total slightly lower or higher than 100 due to rounding.

• Frequency of factors that were rated "Extremely likely" or Moderately likely"

| Factor  | n | %    |
|---|---|------|
| Commuter to campus                                    | 8 | 17.8 |
| Full-time attendance                                  | 5 | 11.1 |
| Part-time attendance                                  | 5 | 11.1 |
| Full-time work outside of studies                     | 7 | 15.6 |
| Part-time work outside of studies                     | 4 | 8.9  |
| Adult student status (i.e., 25 years of age or older) | 7 | 15.6 |
| Economic hardship                                     | 9 | 20.0 |

# **Table B3: Descriptive Statistics for Scale Items**

• 5-point Likert scale (range: Frequently, if not always (4) to Not at all (0))

| Measure/Scale | Scale Theme | Competency<br>Focus | Cronbach's<br>Alpha<br>(reliability) | Mean + SD | Correlation (Cor)? Significance |
|---------------|-------------|---------------------|--------------------------------------|-----------|---------------------------------|
|               |             |                     |                                      |           | (Sign)?                         |

| Transformational   | Transformational    | Good Leader    | 0.73 | 2.46+0.74        | Cor: 0.72     |
|--------------------|---------------------|----------------|------|------------------|---------------|
| Leadership -       | Leadership:         | (LC1-4)        | 0.73 | 2.46±0.71        | (high)        |
| Multifactor        | Idealized Influence | Self (SC1-4)   | 0.74 | 2.52±0.65        | Sign: n/a     |
| Leadership         | (Attributes)        | Sell (3C1-4)   | 0.74 | 2.52±0.65        | Jigii. II/a   |
| Questionnaire      | Transformational    | Good Leader    | 0.64 | 2.57±0.62        | Cor: 0.75     |
| (MLQ)              | Leadership:         | (LC5-8)        | 0.04 | 2.57±0.62        | (high)        |
| (IVILQ)            | Idealized           | Self (SC5-8)   | 0.77 | 2.54±0.68        | Sign: n/a     |
|                    | Influence           | Sell (3C3-6)   | 0.77 | 2.54±0.08        | Jigii. II/a   |
|                    | (Behaviors)         |                |      |                  |               |
|                    | Transformational    | Good Leader    | 0.78 | 2.50±0.70        | Cor: 0.78     |
|                    | Leadership:         | (LC9-12)       | 0.78 | 2.30±0.70        | (high)        |
|                    | Inspirational       | Self (SC9-12)  | 0.81 | 2.50±0.70        | Sign: n/a     |
|                    | Motivation          | Self (3C9-12)  | 0.81 | 2.50±0.70        | Jigii. II/a   |
|                    | Transformational    | Good Leader    | 0.73 | 2.61±0.67        | Cor: 0.76     |
|                    | Leadership:         | (LC13-16)      | 0.73 | 2.01±0.07        | (high)        |
|                    | Intellectual        | Self (SC13-16) | 0.76 | 2.52±0.64        | Sign: n/a     |
|                    | Stimulation         | Sell (SC15-16) | 0.76 | 2.52±0.64        | Jigii. II/a   |
|                    | Transformational    | Good Leader    | 0.70 | 2.54±0.69        | Cor: 0.64     |
|                    | Leadership:         | (LC17-20)      | 0.70 | 2.34±0.09        | (moderate)    |
|                    | Individual          | Self (SC17-20) | 0.68 | 2.46±0.64        | Sign: n/a     |
|                    | Consideration       | Self (3C17-20) | 0.08 | 2.40±0.64        | Jigii. II/a   |
| Authentic          | Self-Awareness°     | Good Leader    | 0.61 | 2.40±0.87        | Cor: 0.62     |
| Leadership -       | Sell-Awareness      | (LC21-22)      | 0.01 | 2.40±0.87        | (moderate)    |
| Authentic          |                     | Self (SC21-22) | 0.65 | 2.55±0.69        | Sign: n/a     |
| Leadership Self-   | Internalized Moral  | Good Leader    | 0.70 | 2.54±0.83        | Cor: 0.62     |
| Assessment         | Perspective*°       | (LC23, LC7)    | 0.70 | 2.34±0.63        | (moderate)    |
| Questionnaire      | Perspective         | Self (SC23,    | 0.70 | 2.53±0.79        | Sign: n/a     |
| (ALQ) + selected   |                     | SC7)           | 0.70 | 2.33±0.79        | Jigii. II/a   |
| related items from | Balanced            | Good Leader    | 0.65 | 2.63±0.80        | Cor: 0.52     |
| MLQ                | Processing*°        | (LC24, LC14)   | 0.03 | 2.03±0.80        | (moderate)    |
|                    | rrocessing          | Self (SC24,    | 0.60 | 2.53±0.74        | Sign: n/a     |
|                    |                     | SC14)          | 0.00 | 2.55±0.74        | 316111 117 4  |
|                    | Relational          | Good Leader    | 0.47 | 25:              | 25: Cor: 0.45 |
|                    | Transparency°       | (LC25-26)      | 3.17 | 2.40±1.00        | (low)         |
|                    | Transparency        | (2023 20)      |      | 26:              | Sign: n/a     |
|                    |                     |                |      | 2.57±0.93        | J.B 11/4      |
|                    |                     | Self (SC25-26) | 0.27 | 25:              | 26: Cor: 0.40 |
|                    |                     | JCII (JC2J-20) | 0.27 | 2.29±0.95        | (low)         |
|                    |                     |                |      | 2.29±0.93<br>26: | Sign: n/a     |
|                    |                     |                |      | 2.52±0.81        | Jigiii. II/ a |
| Relational         | Inclusive           | Good Leader    | 0.71 |                  | Cor: 0.60     |
| Leadership -       | Inclusive°          | (LC27-28)      | 0.71 | 2.62±0.79        | (moderate)    |
| Relational         |                     |                | 0.46 | 2 70±0 67        | Sign: n/a     |
| Leadership         | Francis = *         | Self (SC27-28) |      | 2.70±0.67        |               |
| Questionnaire      | Empowering*         | Good Leader    | 0.50 | 20:              | 20: Cor: 0.46 |
| (RLQ) + selected   |                     | (LC20, LC18)   |      | 2.61±0.90        | (low)         |
| (NEQ) - Selected   |                     |                |      | 18:              | Sign: n/a     |
|                    |                     |                |      | 2.56±0.96        |               |

| related items from |                    | Self (SC20,     | 0.43        | 20:       | 18: Cor: 0.41 |
|--------------------|--------------------|-----------------|-------------|-----------|---------------|
| MLQ, ALQ           |                    | SC18)           |             | 2.52±0.89 | (low)         |
|                    |                    |                 |             | 18:       | Sign: n/a     |
|                    |                    |                 |             | 2.43±0.93 |               |
|                    | Purposeful*        | Good Leader     | 0.62        | 2.53±0.77 | Cor: 0.53     |
|                    | Tarposerar         | (LC8, LC11)     | 0.02        | 2.55±0.77 | (moderate)    |
|                    |                    | Self (SC8,      | 0.64        | 2.52±0.73 | Sign: n/a     |
|                    |                    | SC11)           | 0.04        | 2.32±0.73 | Jigii. II/ a  |
|                    | Ethical*           | Good Leader     | 0.77        | 2.45±0.91 | Cor: 0.63     |
|                    | Etilicai           | (LC3, LC7)      | 0.77        | 2.45±0.91 | (moderate)    |
|                    |                    | Self (SC3, SC7) | 0.73        | 2.46+0.77 | Sign: n/a     |
|                    |                    | + · · · · · · · | +           | 2.46±0.77 |               |
|                    | Process-oriented*  | Good Leader     | 0.49        | 2.61±0.75 | Cor: 0.62     |
|                    |                    | (LC15, LC16)    |             |           | (moderate)    |
|                    |                    | Self (SC15,     | 0.71        | 2.48±0.75 | Sign: n/a     |
|                    |                    | SC16)           |             |           |               |
| Adaptive           | Self-Awareness°    | Good Leader     | 0.61        | 2.40±0.87 | Cor: 0.62     |
| Leadership         | (same as           | (LC21-22)       |             |           | (moderate)    |
| No questionnaire   | Authentic          | Self (SC21-22)  | 0.65        | 2.55±0.69 | Sign: n/a     |
| exists – mapped    | Leadership – Self- |                 |             |           |               |
| MLQ, ALQ items to  | Awareness)         |                 |             |           |               |
| competencies       | Cognitive          | Good Leader     | n/a –       | 2.53±0.85 | 13: Cor: 0.44 |
|                    | Complexity°        | (LC13)          | represented |           | (low)         |
|                    |                    | Self (SC13)     | by a single | 2.57±0.89 | Sign: n/a     |
|                    | Social             | Good Leader     | item thus   | 2.58±0.91 | 20: Cor: 0.25 |
|                    | Intelligence°      | (LC24)          | not a scale |           | (little)      |
|                    |                    | Self (SC24)     | and         | 2.55±0.98 | Sign: n/a     |
|                    |                    | ` ′             | Cronbach's  |           |               |
|                    |                    |                 | does not    |           |               |
|                    |                    |                 | apply       |           |               |

<sup>\*</sup> Contains one or more scale items different than in its original scale – we mapped to items already presented in our survey from other areas that seem very closely related in order to manage survey length and mitigate confusion with seemingly repetitive items.

**Table B4: Descriptive Statistics for Demographic Variables** 

|                                   | Survey |                 | NCES* | MCCCD°            | LShape <sup>#</sup> |                |                 |
|-----------------------------------|--------|-----------------|-------|-------------------|---------------------|----------------|-----------------|
| Measure                           | ı      | n               | Š     | %                 | (2015-<br>2016)     | (Fall<br>2022) | (2015-<br>2019) |
| Gender (n=56)                     |        |                 |       |                   |                     |                |                 |
| Female                            | 2      | 2               | 39    | 9.3               | 55.3                | 57             | 61.7            |
| Male                              | 3      | 2               | 57    | 7.1               | 44.7                | 42             | 36.2            |
| Non-binary / third gender         |        | 1               | 1     | .8                |                     |                |                 |
| Prefer not to say                 | 1      |                 | 1.8   |                   |                     | 1              | 2.1             |
| Race (n=56)                       |        |                 |       |                   |                     |                |                 |
| American Indian or Alaskan Native | 16     | 11 <sup>h</sup> | 28.6  | 19.6 <sup>h</sup> | 1.1                 | 2              | 2.3             |

<sup>°</sup> Contains one or more scale items adapted from original wording to match the intended focus (leader or self).

| Asian                                       | 1 1      | <b>4</b> <sup>h</sup>                        | 7.1     | 7 1 h                                | 6.6       |    | ГО   |
|---|----------|--|---------|--------------------------------------|-----------|----|------|
| Asian                                       | 6        | 2 <sup>h</sup>                               | 7.1     | 7.1 <sup>h</sup><br>3.6 <sup>h</sup> | 6.6       | 5  | 5.9  |
| Black or African American                   | _        |  | 10.7    |                                      | 14.9      | 6  | 13.7 |
| Native Hawaiian or Other Pacific Islander   | 2        | 0 <sup>h</sup>                               | 3.6     | 0 <sup>h</sup>                       | 0.5       | 0  | 40.0 |
| Prefer not to say                           | 2        | 2 <sup>h</sup>                               | 3.6     | 3.6 <sup>h</sup>                     |           | 3  | 10.3 |
| Two or more races                           | 3        | 1 <sup>h</sup>                               | 5.4     | 0.2 <sup>h</sup>                     | 3.4       | 5  | 5.0  |
| White                                       | 23       | 18 <sup>h</sup>                              | 41.1    | 32.1 <sup>h</sup>                    | 50.1      | 41 | 26.0 |
| Hispanic                                    | n/a      | 18 <sup>h</sup>                              | n/a     | 32.1 <sup>h</sup>                    | 23.5      | 39 | 36.9 |
| Ethnicity: Hispanic, Latino/a/x, or of Span | 1        |  |         |                                      |           |    |      |
| No  | ļ        | 4  |         | 0.7                                  |           |    |      |
| Prefer not to say                           | <b>-</b> | 1  |         | '.1                                  |           |    |      |
| Yes   | 1        | 8  | 32      | 2.1                                  |           |    |      |
| Community College completion (n=56)         |          |  |         |                                      |           |    |      |
| No  |          | 2  |         | 1.4                                  |           |    |      |
| Still attending                             | (        | 5  | 10      | 0.7                                  |           |    |      |
| Yes   |          | 8  | L       | 7.9                                  |           |    |      |
| How many years attended community co        | llege (  | n=56)  |         |                                      |           |    |      |
| 0   | (        | )  |         | 0                                    |           |    |      |
| 1   | 1        | 8  | 32      | 2.1                                  |           |    |      |
| 2   | 2        | 1  | 3       | 7.5                                  |           |    |      |
| 3   | 1        | 2  | 2:      | 1.4                                  |           |    |      |
| 4+  | į        | 5  | 8       | 3.9                                  |           |    |      |
| Transfer to a 4-year college or university  | (n=56)   |  |         |                                      |           | •  | •    |
| No  | (        |  | 10      | 0.7                                  |           |    |      |
| Not yet, still a community college          | 8        | 3  | 14      | 4.3                                  |           |    |      |
| student                                     |          |  |         |                                      |           |    |      |
| Yes   | 4        | 2  | 7!      | 5.0                                  |           | 34 |      |
| If transferred, how many years attended     | 4-yeaı   | colle  | ge or u | ıniversit                            | ty (n=42) |    |      |
| 0   | 1        | 2  |         | .8                                   | , , , ,   |    |      |
| 1   |          | 7  |         | 6.7                                  |           |    |      |
| 2   | 2        | 5  |         | 9.5                                  |           |    |      |
| 3   | <b>-</b> | <u>-</u><br>1                                |         | ).5                                  |           |    |      |
| 4+  | ļ        | 1  |         | 0.5                                  |           |    |      |
| If transferred, graduated from a 4-year co  | <u> </u> |  |         |                                      |           |    |      |
| No  |          | 5  |         | 4.3                                  |           |    |      |
| Not yet, still attending a 4-year college   |          | <u>,                                    </u> |         | 6.7                                  |           |    |      |
| or university                               | ĺ '      | •  |         | J.,                                  |           |    |      |
| Yes   | 2        | 9  | 60      | 9.0                                  |           |    |      |
| Residential status through majority of co   | <u> </u> |  |         |                                      | ce (n=56) |    |      |
| Lived off-campus and commuted to            | 1        | 0  |         | 3.6                                  | 98.6      |    |      |
| college                                     | 3        | J  | ) 5:    | 5.0                                  | 30.0      |    |      |
| Lived on-campus                             | 2        | 6  | //      | 6.4                                  | 1.4       |    |      |
| Current employment status (n=56)            |          |  | 40      | U. <del> T</del>                     | 1.4       |    |      |
|   | 1        | 1  | 21      | 5.0                                  |           |    |      |
| Employed full-time (40 or more hours        | 1        | 4  | 2:      | 5.0                                  |           |    |      |
| per week)                                   | _        | 1  | Δ.      | 2.0                                  |           |    |      |
| Employed part-time (up to 39 hours per      | -        | 4  | 4       | 2.9                                  |           |    |      |
| week)                                       |          |  |         |                                      |           |    |      |

| Other  | 1          | 1.8             |            |    |  |
|--|------------|-----------------|------------|----|--|
| Self-employed                                  | 1          | 1.8             |            |    |  |
| Student  | 10         | 17.9            |            |    |  |
| Unable to work                                 | 2          | 3.6             |            |    |  |
| Unemployed and currently looking for work      | 2          | 3.6             |            |    |  |
| Unemployed and not currently looking for work  | 2          | 3.6             |            |    |  |
| Employment status through majority of co       | ommunity o | ollege experie  | nce (n=56) |    |  |
| Employed full-time (40 or more hours per week) | 4          | 7.1             | 66.6       |    |  |
| Employed part-time (up to 39 hours per week)   | 35         | 62.5            |            |    |  |
| Student  | 12         | 21.4            | 33.4       |    |  |
| Unable to work                                 | 2          | 3.6             |            |    |  |
| Unemployed and currently looking for work      | 2          | 3.6             |            |    |  |
| Unemployed and not currently looking for work  | 1          | 1.8             |            |    |  |
| Attendance status through majority of co       | mmunity co | llege experier  | nce (n=56) |    |  |
| Attended full-time                             | 27         | 48.2            | 28.8       | 28 |  |
| Attended part-time                             | 29         | 51.8            | 71.2       | 72 |  |
| Experienced economic hardship during co        | mmunity co | ollege experier | nce (n=56) |    |  |
| No   | 12         | 21.4            |            |    |  |
| Prefer not to say                              | 3          | 5.4             |            |    |  |
| Yes  | 41         | 73.2            | 43.0       |    |  |
|  |            |                 |            |    |  |

<sup>\*</sup>NCES: National Center for Education Statistics; numbers represent institution type: 2-year from 2015-2016 profile of undergraduate students (Campbell & Wescott, 2019).

## Table B5: Descriptive statistics for administrator interview competency sorting/ranking

- 4-point Likert scale (range: Very important (3) to Not very important (0))
- N=8 unless otherwise noted

| Measure/Scale | Scale Theme | Fre | equency/%         |           |                       |                    | Mean +<br>SD |
|---------------|-------------|-----|-------------------|-----------|-----------------------|--------------------|--------------|
|               |             |     | Very<br>important | Important | Somewhat<br>Important | Not very important |              |
|               |             | n   | 5                 | 2         | 1                     | 0                  |              |

<sup>°</sup>MCCCD: Maricopa County Community College District; in 2022 represents 94,846 credit students in 10 community colleges in the Phoenix metropolitan area. Partnered with LeaderShape in the past and our original survey distribution went primarily to past participants from MCCCD (Maricopa County Community College District, 2022).

<sup>\*</sup>LeaderShape: Data pulled from the original survey distribution population, representing attendees from MCCCD and Salt Lake Community College.

h: Since our survey separated ethnicity (Hispanic, Latino/a/x, or of Spanish origin) into a separate question, these column indicate the frequency counts and percentage if instead the answers to the separate question were merged into their own race category.

| Transformational | Idealized     | %  | 62.5 | 25.0   | 12.5 | 0    | 2.50±0.76 |
|------------------|---------------|----|------|--------|------|------|-----------|
| Leadership -     | Attributes    | /0 | 02.3 | 23.0   | 12.5 |      | 2.30±0.76 |
| Multifactor      | Inspirational | n  | 0    | 6      | 2    | 0    | 1.75±0.46 |
| Leadership       | Motivation    | %  | 0    | 75.0   | 25.0 | 0    | 1.75±0.46 |
| Questionnaire    |               |    | 7    |        |      |      | 2.0010.25 |
| (MLQ)            | Intellectual  | n  | ,    | 1 12.5 | 0    | 0    | 2.88±0.35 |
| (IVILQ)          | Stimulation   | %  | 87.5 | 12.5   | 0    | 0    |           |
|                  | Individual    | n  | 3    | 3      | 2    | 0    | 2.13±0.83 |
|                  | Consideration | %  | 37.5 | 37.5   | 25.0 | 0    |           |
| Authentic        | Self-         | n  | 5    | 3      | 0    | 0    | 2.63±0.52 |
| Leadership -     | Awareness     | %  | 62.5 | 37.5   | 0    | 0    |           |
| Authentic        | Internalized  | n  | 3    | 4      | 1    | 0    | 2.25±0.71 |
| Leadership Self- | Moral         | %  | 37.5 | 50.0   | 12.5 | 0    |           |
| Assessment       | Perspective   |    |      |        |      |      |           |
| Questionnaire    | Balanced      | n  | 5    | 2      | 1    | 0    | 2.50±0.76 |
| (ALQ) + selected | Processing    | %  | 62.5 | 25.0   | 12.5 | 0    |           |
| related items    | Relational    | n  | 5    | 0      | 3    | 0    | 2.25±1.04 |
| from MLQ         | Transparency  | %  | 62.5 | 0      | 37.5 | 0    |           |
| Relational       | Inclusive     | n  | 7    | 1      | 0    | 0    | 2.88±0.35 |
| Leadership -     |               | %  | 87.5 | 12.5   | 0    | 0    |           |
| Relational       | Empowering    | n  | 1    | 6      | 0    | 0    | 2.14±0.38 |
| Leadership       | (n=7)         | %  | 85.7 | 14.3   | 0    | 0    |           |
| Questionnaire    | Purposeful    | n  | 3    | 3      | 0    | 2    | 1.88±1.25 |
| (RLQ) + selected |               | %  | 37.5 | 37.5   | 0    | 25.0 |           |
| related items    | Ethical       | n  | 5    | 1      | 2    | 0    | 2.38±0.92 |
| from MLQ, ALQ    |               | %  | 62.5 | 12.5   | 25.0 | 0    |           |
|                  | Process-      | n  | 4    | 4      | 0    | 0    | 2.50±0.53 |
|                  | oriented      | %  | 50.0 | 50.0   | 0    | 0    |           |

#### Appendix C: Interview Protocol

## Explaining the purpose of the interview

Thank you for taking the time to meet with me today. Is this still a good time for our interview? [pause for answer]

We are interested in understanding community college administrators' perceptions on the adoption and implementation of successful student leadership development programs. In addition, we are seeking your input regarding how you define competencies necessary for student leader development.

In the first part of the interview, I am going to be asking you questions about how your institution has been affected by factors that could possibly impact the adoption and implementation of a successful leadership program. The second part of the interview will consist of a sorting exercise using Google Jamboard to discuss the leadership qualities that you believe students should possess if they wish to be good leaders.

#### Permission Process

Before we begin the interview, please know that participating in this capstone project is voluntary and your responses are anonymized. I will be recording the interview for efficiency and the recording will be transcribed, however, only me, my research partner, and our advisor will review the verbatim responses which will be scrubbed of any personally identifying information. At any point during the interview, if you would like me to stop, just tell me to do so and we will stop the recording. Do you have any questions before we begin?

## • Begin the Recording

Please state the name and title of the individual and note the date and time of the interview.

#### **Appendix D: Interview Questions**

<u>Introduction Questions</u> – (Check LinkedIn for answers to the first two questions, then ask them the third question. \*Only ask the first two questions if information cannot be found on LinkedIn)

- 1. What are your credentials i.e., your highest degree?
- 2. What is your current title at your institution?
- 3. Can you expand on your role at the institution?

\*\*RQ3: What is the relationship between community college environmental and sociological factors and perceived adoption and success of leadership programs?

#### Primary Questions-RQ#3 -

#### **Draft of Questions-**

- 1. How has the increased workforce and academic outcome (including workforce preparedness) demands affected the institution's focus and ability to implement formal and successful leadership programs?
- 2. To what extent has declining public funding affected the focus of the institution on extracurricular program development like leadership programs?
  - a. What other community college factor(s) may have an impact on implementing extracurricular programs or etc.?
- 3. In your opinion, what are the outcomes of a successful leadership program?
- 4. What should a partnership with a leadership program include for it to be successful and long-lasting?

#### Questions Directly Related to LeaderShape Partnership-

- 1. Why did your institution decide to partner with LeaderShape?
- 2. What were you hoping to get from the partnership?
- 3. What challenges were presented during the partnership?
- 4. To what extent were any of these challenges related to your status as a community college? Were any related to environmental (public funding i.e., legislative and funding discrepancies) and student sociological (personal demographics, college attendance pattern, or economic status) factors?

\*\*RQ1: How do different community college stakeholders define competencies necessary for students to develop as leaders?

Primary questions/categories around perceptions of how students perceive themselves as leaders (via competencies) and the extent to which competencies define a student leader ready to enter or continue in the workforce.

Primary Categories/Card Sorting Exercise-RQ#1 -

# Leaders should or must have the following qualities (TL = Transformational Leadership, AL = Authentic Leadership, and RL = Relational Leadership)

Openness to new and different perspectives – TL

Coaches and teaches others - TL

Optimistic about future plans and what needs to be accomplished – TL

\* – TL

Knows their strengths and weaknesses; accepts feedback – AL

Shares thoughts and feelings; admits mistakes to others – AL

Seeks and listens to the opinions of others before making decisions – AL

Guided by morals and actions reflect their core values – AL

Respects the differences in others; values equity and involvement – RL

- \* RL
- \* RL
- \* RL
- \* RL

<sup>\*</sup>Note: Per contract with the inventory provider, some individual competency scale items are redacted given their intellectual property.

#### Appendix E: Student Leadership Development Questionnaire - Interview Alternative

## STUDENT LEADERSHIP DEVELOPMENT QUESTIONNAIRE

Thank you for taking the time to share your thoughts with us today!

We are interested in understanding community college administrators' perceptions on the adoption and implementation of successful student leadership development programs. In addition, we are seeking your input regarding how you define competencies necessary for student leader development.

The first part of this questionnaire interview relates to how your institution has been affected by factors that could possibly impact the adoption and implementation of a successful leadership program. The second part consists of categorizing leadership qualities.

Before you begin, please know that participating in this capstone project is voluntary and your responses are anonymous. Only me, my research partner, and our advisor will review your verbatim responses which will be scrubbed of any personally identifying information.

#### **Part I - Interview Questions:**

- 1. Can you expand on your role at the institution?
- 2. How has the increased workforce and academic outcome (including workforce preparedness) demands affected the institution's focus and ability to implement formal and successful leadership programs?
- 3. To what extent has declining public funding affected the focus of the institution on extracurricular program development like leadership programs?
  - a. What other community college factor(s) may have an impact on implementing extracurricular programs or etc.?
- 4. In your opinion, what are the outcomes of a successful leadership program for community college students?
- 5. What should a partnership with an external leadership development provider include for it to be successful and long-lasting?

Questions Directly Related to LeaderShape Partnership – \*Not included in questionnaires sent to those with no partnership with LeaderShape\*

1. Why did your institution decide to partner with LeaderShape?

- 2. What were you hoping to get from the partnership?
- 3. What challenges were presented during the partnership?
- 4. To what extent were any of these challenges related to your status as a community college?
- 5. Were any related to environmental (public funding i.e., legislative and funding discrepancies) and student sociological (personal demographics, college attendance pattern, or economic status) factors?

## Part II - Categorization of Leadership Qualities:

Please rate the following 13 leadership qualities on their importance to community college student leadership development, per the following scale: (1) Not Very Important, (2) Somewhat Important, (3) Important, (4) Very Important. For each quality ask yourself how important is it that students possess this quality to be a good leader at their stage of leadership development? Then briefly explain why you chose that level of importance.

| Quality   | Rating | Explanation |
|---|--------|-------------|
| Openness to new and different perspectives                          |        |             |
| Coaches and teaches others  |        |             |
| Optimistic about future plans and what needs to be accomplished     |        |             |
| *   |        |             |
| Knows their strengths and weaknesses; accepts feedback              |        |             |
| Shares thoughts and feelings; admits mistakes to others             |        |             |
| Seeks and listens to the opinions of others before making decisions |        |             |
| Guided by morals and actions reflect their core values              |        |             |
| Respects the differences in others; values equity and involvement   |        |             |
| *   |        |             |
| *   |        |             |
| *   |        |             |
| *   |        |             |

\*Note: Per contract with the inventory provider, some individual competency scale items are redacted given their intellectual property.

# **Last Question**

Is there anyone that you could recommend, either at your community college or at a different community college, that we could interview regarding student leadership development?

#### Appendix F: Final Codebook for Community College Administrator Interviews

## Theme #1: Student Outcomes of LD Programs (Deductive)

**Code #1a: Desired Outcomes (Deductive)** – *Explanation:* The skills administrators want students to have and/or they should have once their leadership training is complete. *Example:* "students who participate in leadership activities have higher levels of educational achievement and explicitly exhibit personal change than students who are not involved in these activities (Astin, 1993)."

**Code #1b: Skill Development (Deductive)** – *Explanation:* Student skill development in LD programs. *Example:* "Finally, today's work environment volatility and labor demands call upon higher education and leadership researchers to devise specific student leadership competencies that can be infused into traditional academic preparedness to produce graduates with both technical and relational skills."

Code #1c: Student Preparedness (Inductive & Deductive) – Explanation: (1) Preparedness includes exposing students to different aspects of leadership outside of formal LD programs, so they are prepared for the real world (Inductive) (2) Formal LD programs better prepare CC students for leading in the real world. Example: The study found that students who participated in formal leadership programs had significant positive changes on measured leadership outcomes and enhanced their overall leadership skills, and the longitudinal study on LeaderShape revealed that the program successfully increased college students' ability to create organizational visions and their transformational leadership skills (Zimmerman-Oster & Burkhardt, 1999).

Code #1d: Positive Changes (in Leadership Outcomes and Skills) (Deductive) – Explanation: Significant positive changes in leadership outcomes and overall leadership skills as a result of formal LD programs. The positive changes are the actual change in their skills and outcomes. Example: "According to the literature, leadership programs are a better way to prepare students for leading in the real world; however, even if the college offers extracurricular leadership opportunities they are not as comprehensive as a formal leadership program (Eich, 2008)."

Code #1e: Leader Identity (Deductive) — Explanation: CC student identity is Impacted by LD programs or lack thereof. Example: "the organization believes that community college students, among students of other historically underserved groups, "may not typically see themselves as leaders" (LeaderShape, personal communication, 2022). "Students enter leader development programs with their own meaning of leader identity shaped by their assumptions, interpretations, and life experiences, but it is soon changed by a new set of identity meanings learned in the leadership development programs".

# Theme #2: Environmental Factors i.e., financial status, attendance status, etc. (Deductive)

Code #2a: Ability to Implement (Deductive) – Explanation: CC's ability to implement LD programs when faced with environmental factors such as the financial status of the CC. Example: "Community college environmental factors, such as institutional objectives, organizational structure types, and legislative and funding discrepancies, may impact the institutions' focus and ability to implement formal, successful leadership programs, especially as compared to traditional 4-year institutions."

Code #2b: External Programming Requirements (Inductive) – Explanation: CC requirements for quality external programming. Example: Giving more money to retention offices at the CC like Student Life will lead to quality external programming like LD programs, professional events, and guest speakers

Code #2c: Impact on Student Engagement (Deductive) – Explanation: Sociological factors and attendance status (full-time or part-time) of student population may impact their ability to engage in leadership opportunities; hence, some students can participate, and others cannot. Also, includes CC students at a disadvantage in terms of LD programs & training. Example: "Community college student sociological factors, such as personal demographics, college attendance pattern, and economic status may impact the ability to engage and participate in leadership opportunities" and "Supporting the data on likeliness to be commuters, part-time attendees, and returning adult students (those 25 years of age or older and re-entering education after a gap), is recent research designed to fill a gap in understanding how to engage these students (Jacoby, 2014). This is also impactful when considering statistics such as greater than 45% of full-time students work and 70% of part-time students work while attending college, which may influence their educational experience and ability to participate in extracurricular activities (Campbell & Wescott, 2019; Jacoby, 2014)."

Code #2d: Pressure to Meet Demands (Deductive) – Explanation: CCs under pressure to meet workforce and academic outcome demands. Example: "Community colleges are under external pressure to meet increased workforce and academic outcome demands, including workforce preparedness such as social skills."

#### Theme #3: LD Programming at CCs (Inductive and Deductive)

Code #3a: Creating Programming (Inductive) – Explanation: (1) Relates to how leadership is taught at the CC-the pedagogical element of it; how the learning of it is structured. (2) CCs create their own LD programs for students. Example: The CC creates/puts together leadership workshops for students. Homegrown programs that they have designed with certain themes and various workshops that are put on by the CCs own professionals usually those in student life.

**Code #3b: LeaderShape Programming (Inductive)** – *Explanation:* LeaderShape (LS) programming – what works best for CC students. *Example:* LS Institute requires a big commitment from students because it is a week – this commitment is a big barrier to CC students being a part of the program (they have to get out of work, not be with their families, etc. for that week); Catalyst works better for students.

Code #3c: Program Scheduling (Inductive) – Explanation: (1) How colleges schedule plans of study and classes for various majors and how that might affect students pursuing extracurricular activities, including being involved in leadership programs. (2) Scheduling/Timing of LS programs. Example: The timing of the LS programs matters; for example, when Institute or Catalyst is done in the summer, students become disengaged from what they learned, and it is difficult to get them to reengage in the fall. Acted as a reboot for some of the professional staff i.e., got them ready for another year of working with students.

Code #3d: Advantages for CC Students (Inductive) – Explanation: Benefits of developing leadership skills at a CC. The advantage for CC Students is the supportive atmosphere that exists in a CC because they are smaller than a regular university and have a more community atmosphere. When students are trying to

develop their leadership skills at a CC they have support in a more intimate way. *Example:* CCs are a good place to develop leadership skills because students are surrounded by people who support them.

Code #3e: CC Organizational Culture (Deductive) – Explanation: (1) The organizational culture of the CC as it pertains to leadership, students, faculty, etc. (2) CCs with adhocratic culture will be more successful with their programming. Example: "Therefore, community colleges with an adhocracy culture may be best suited to partner with external companies like LeaderShape or approaching colleges with an adhocratic proposition to leadership programming may yield increased success."

Code #3f: CC and Program Mission Alignment (Deductive) - Explanation: The most successful LD programs share a common mission with the CC. CCs that worked with LeaderShape shared a mission with them. LD programs must show it values its partnership with CC by being flexible, listening to feedback from the CC, and be willing to adapt the LD program to the CCs student population. Example: "the most successful leadership programs have theoretical orientations that are well-defined and include a strong relationship between the missions of the institution and the leadership program. Conveying this shared purpose is believed to be a required step in the success of the leadership organization (Morphew & Hartley, 2006, as cited in Owen, 2012)."

Appendix G: Elements of a High-Quality Leadership Program

| Pedagogical Elements<br>from Literature  | LeaderShape Institute Elements  | Gaps between Literature & LeaderShape  |
|--|---|--|
| Consistently involved in program development   | LeaderShape reviews their curriculum for all of their programs annually and makes changes as needed.  | No gaps between the literature and LeaderShape elements in this area.  |
| Institutional and program alignment in terms of values; strong relationship between the two entities | Administrators state there is a strong relationship between their college and LeaderShape, and that the values LeaderShape teaches in the program are the ones they want their students to learn. | No gaps between the literature and LeaderShape elements in this area. However, there was one administrator who had an issue with the Star Power simulation. For example, one administrator stated "the partnership that we had with LeaderShape was so strong that we knew we always had someone that we could go to. We knew what to expect. Um! We knew that they would have resources available for us. And I think just that, having that relationship for so many years with the same people, um helped us to be successful." |
| Sound learning methodology   | LeaderShape has a set methodology for each of the programs that they provide to prepare students to be leaders. They have established simulations and activities that they use in each program.   | No there are no gaps between the literature and LeaderShape elements in this area. The methodology LeaderShape uses to help prepare students to be good leaders is made up of activities that they consider "strong and well established."   |

| Rich and supportive learning environment   | During the first day of Institute the participants create a "Family Cluster" which becomes their primary reference group. The group offers feedback and support throughout the program. | No there are no gaps between the literature and LeaderShape elements in this area. The Institute program has as one of its outcomes, "Develop relationships that honor the dignity of individuals and groups in the context of equity and social systems." The focus on this objective is shown in the formation of the "Family Cluster" on the first day. This group aids students in forging a strong community for the four days they are participating in the program. |
|--|---|--|
| Teach students why it is important to be a good leader in addition to assisting them in becoming leaders | The program design does not include explaining to students why it is important to be a good leader.   | Yes there is a gap between the elements from literature and LeaderShape's elements in this area. The program explores what leadership means but not why it is important to be a good leader.   |
| Objectives are clearly stated and described  | The learning outcomes for the program are stated at the beginning of the program but the objectives of the daily activities that make up the program are not stated.                    | Yes there is a gap between the literature and LeaderShape elements in this area. Participants know what the purpose of the program is i.e., they are informed of the learning outcomes on the first day of Institute. However, the objectives of the daily activities that make up the program are not stated or described.  |
| Programs based on well-defined theoretical orientations  | The program is not based on a well-defined theoretical orientation.   | Yes there is a gap between the literature and LeaderShape's elements in this area. Their programs are not based on a well-defined theoretical orientation. However, the DiSC instrument, a personality assessment completed the second day, has been rigorously evaluated in terms of reliability and validity.  |