Developing a talent pipeline: A community of practice creates and evaluates a leadership development program

by

Roberta Tina Maldonado Franzen

B.S., Kansas State University, 2000
M.S., Central Michigan University, 2011

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Leadership Communication

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Abstract

Expectations of leadership development continue to evolve in today's work environment. An innovative practice between university and industry partners has emerged as a response to these expectations. In this trend, through an engaged scholarship lens, a leadership development pilot program prepares college students with essential skills to lead before entering the workforce. Three phases lay the foundation for this engaged scholarship approach: creating a community of practice, developing a leadership development program using the 70-20-10 concept (Johnson et al., 2018), and evaluating expectations and outcomes to ensure continuous improvement.

The community of practice consists of the university and industry collaborators. The 70-20-10 framework, created by researchers and authors working with the Center for Creative Leadership, blends experiences (70%), coaching/mentoring (20%), and formal training (10%) to strengthen participants' leadership acumen (Johnson et al., 2018). Two evaluation tools assess the program: Kirkpatrick's four-level model (Kirkpatrick, 1998) and appreciative inquiry (Cooperrider & Whitney, 2005). Kirkpatrick's four-level training evaluation model assesses changes in reaction, learning, behavior, and results (Kirkpatrick, 1998). Appreciative inquiry focuses on what is working well and practices continuous improvement (Cooperrider & Whitney, 2005).

This study presents an engaged scholarship approach to create and evaluate a leadership development pilot program committed to preparing a talent pipeline. The purpose of the study is to understand better how the process of program evaluation is leveraged to 1) improve the Industry Fellowship Program outcomes and 2) build a community of practice to advance community engagement. The study focused on the participation of 19 students and their

responses to online surveys and focus group interviews. Additionally, field notes and other relevant documentation such as monthly agendas contributed to lessons learned by the community of practice.

This study led to a better understanding of how program evaluation may be leveraged to build a community of practice to advance community engagement and improve program outcomes. The evaluation led to a better understanding of the Fellows' reactions to programming activities, discovery of acquired learning, application of key learnings (behavior changes), results of full-time employment. Implications of research are identified lessons learned from engaging in a community of practice.

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Mary Hale Tolar

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Keywords: Engaged scholarship, community of practice, leadership development, 70-20-10 framework, evaluation, Kirkpatrick's four-level model, appreciative inquiry

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Dedication

Riley. Spencer. Mark. Your constant love and support complete me.

Preface

The basis for this research started with a personal interest in workforce development and continued with a shared commitment to working with others to develop talent. As the competition to attract and retain diverse talent increases, creative and forward-thinking processes must emerge. The need to address this problem can propel new or existing relationships. Fortunately, the researcher was able to engage an industry partner who shared a similar passion.

The partnership created an environment to prepare emerging leaders to join the workplace. The leadership development program was co-created and co-evaluated with members of industry and academia. It is imperative to acknowledge that the collaboration led to the development of this research project. This dissertation is the original product of the author, Roberta Tina Maldonado Franzen.

Chapter 1 - Introduction

Introduction

Employers responsible for hiring in the current labor market should monitor workforce

trends and identify strategies for recruiting and retaining employees if they desire a competitive

edge within their fields (Koc, 2018). Mercer (2016), a global consulting company, reported that

90% of employers expect an increase in competition for future team members. According to

Tucker (2019), there is difficulty attracting talent with the necessary skills to meet an

organization's mission, and companies must pivot their focus to strategic workforce planning.

Harriott (2019) explains strategic workforce planning is about more than hiring the right person

with the right skills at the right time; it is "creating conditions to align and empower employees

to do their best work around a shared purpose that meets the goals of the company" (p.10). To

remain competitive and be an employer of choice, organizations may embrace this approach and

identify other obstacles to recruiting the best and the brightest. One obstacle is that individuals

entering the workforce today are exploring professional opportunities at nonprofit organizations

over traditional corporate employers (Benjamin, 2003). Therefore, corporate employers who

value charitable giving and employee volunteerism may choose to highlight their community

service and philanthropic efforts to broaden their appeal. According to the National Association

for Colleges and Employers (NACE) Staff (2019), another challenge is increasing applicants'

diversity, and employers are responding by incorporating recruitment practices to attract a

broader pool of women and underrepresented racial/ethnic individuals. NACE Staff (2019)

surveyed employers and learned that 88 percent created a plan to attract diverse talent. Hence,

with an increase in employers diversifying the applicant pool, companies compete for the same

highly talented, diverse workforce. As a result, hiring managers must prepare innovative

strategies that proactively lure potential talent. One way is to create a diverse talent pipeline by building relationships with key stakeholders, such as educators and industry (Zaza et al., 2019). A talent pipeline identifies and develops individuals skilled in certain areas to meet the organization's needs (Jackson, 2017). Another strategy is to build a bench of talent by designing a program to equip college students with the skills to lead. According to Nelson and Dodd (2017), there is an increase in university and community partnerships. These relationships create an environment for collaboration to improve talent readiness.

Typically, students build their formal leadership development journey on college campuses, and those skills transition into the workplace. Eich (2008) states, "leadership development is undoubtedly an important outcome of an undergraduate education" (p. 176), suggesting academia provides a space for students to learn how to lead, which prepares them to join the workforce. Snook et al. (2012) explain that the practice of teaching leadership continues to grow in higher education, and so does the expectation of being skilled. Many universities are concerned about developing leaders, and as a result, there is an increase in programs across the nation (Zimmerman-Oster & Burkhardt, 1999). Zimmerman-Oster and Burkhardt (1999) suggest that teaching leadership should be a collaborative process focusing on educating young adults on society's broader impact. Therefore, a partnership implemented at an institution of higher education, specifically a land-grant university, may emerge as the necessary first step in preparing the talent pipeline.

The Morrill Act of 1862 designated land for states to create an environment of learning to teach on topics such as agriculture and mechanical arts, and this effort increased access to the working class (Association of Public & Land-Grant Universities (APLU), 2020; Gavazzi & Gee, 2018; Morrill Act, 1862). The mission across land-grant institutions focuses on teaching,

research, and service (Gavazzi & Gee, 2018; National Research Council, 1995). To extend education and a civic mission, a land-grant institution can expand that goal with industry partnerships and build a pathway for employment. After all, the land-grant works to help communities prosper by extending access to learning, including career readiness. A land-grant institution that values preparing the next generation to lead in their community for the public good can take a proactive approach by developing students in collaboration with an industry partner. It is worth noting that such cooperation may yield a blending of similar cultures if the industry partner shares similar values and is committed to the betterment of the agriculture field. On the other hand, partnerships may experience competing priorities as they advance their visions, and collaborators should be open to exploring the tension within both environments. Despite everything, the partners may agree on the final destination yet disagree on the journey to get there together.

A corporation may align with a land-grant mission when a company culture embeds its daily work values, particularly to create a global community where everyone can prosper and put people first. It is beneficial when the corporation and land-grant share a commitment to aiding the communities they serve. For example, an industry partner committed to community engagement by collaborating with others through corporate giving may seem like a natural orientation to developing a talent pipeline. The mutual benefit or shared purpose is creating a skilled workforce. A land-grant institution and a privately held corporation providing innovative solutions in agricultural-based education and services, respectively, share a vision of developing others to lead in a global and inclusive workplace (Figure 1.1).

Figure 1.1.

Community Engagement Through Shared Purpose

Land-Grant Institution

Teaching
Research
Service
Prepare Emerging Talent

Agricultural-Based Education and Services

Community Engagement

Industry

Global Leader
Put People First
Everyone Can Prosper
Hire Emerging Talent
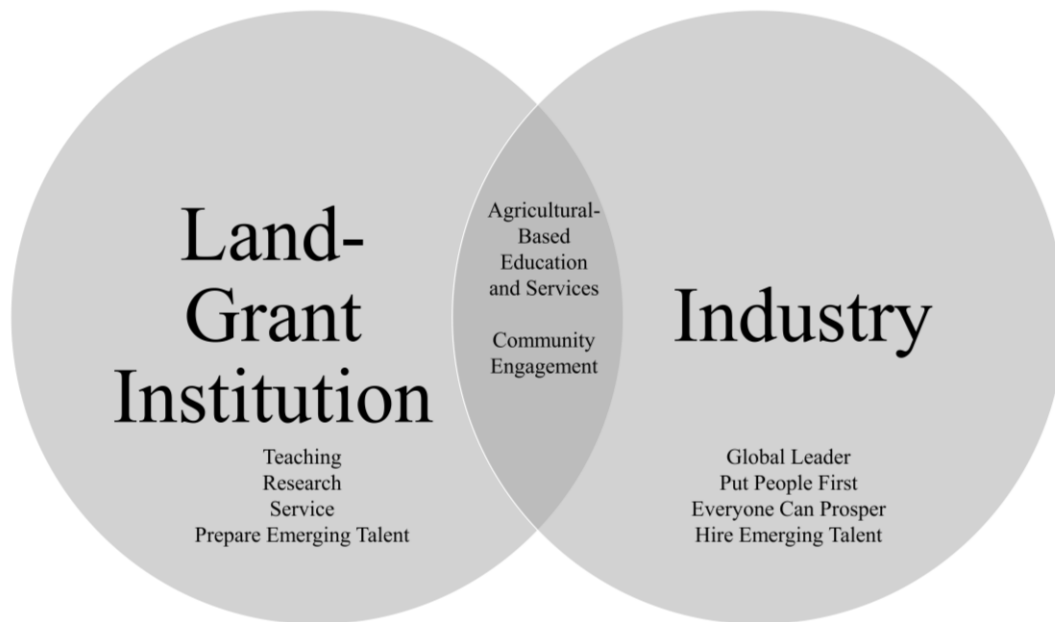
Within academia, majors and minors exist to provide students with a space to learn how to lead, which prepares them to join the workforce with those skills (Seemiller, 2018). Specifically, Kansas actively seeks the opportunity to create a pipeline of agricultural and engineering talent and focus on the development of industry-driven outcomes in higher education majors and minors (Ag Growth Summit, 2018). Nevertheless, there is still a gap in how state leaders understand graduates of these programs' ability to lead upon workforce entry. In industry, employers eagerly await new employees' arrival to apply leadership skills to help solve issues that have a broader impact on society. These aspirations can conflict with one another if academia focuses on developing specific knowledge, skills, and abilities, while the industry has different needs. For example, the industry partner may believe a lack of diverse talent is readily available to lead upon college graduation. Merging industry and academic collaborators' experiences can spark creative solutions (Barge & Schockley-Zalabak, 2008). Therefore, an

opportunity evolves to create an experience outside of the traditional classroom to establish a pipeline of skilled and diverse talent. As a result of an emerging need and an existing university partnership, the opportunity for an engaged scholarship approach to this work can develop. Partners from industry and academia may collaborate to design, deliver, and evaluate a leadership development program for existing undergraduate students to create a talent pipeline to join the industry.

Communities have a distinct opportunity to bridge their knowledge and experiences to better society (Post et al., 2016). As a shared endeavor and responsibility for creating innovative practices, university and industry stakeholders sometimes team up in the form of community engagement, thus creating a space for a new community to explore a mutual concern and develop solutions through collaboration (Schockley-Zalabak et al., 2017). The processes and resources available to support community engagement can be adopted in many environments and professional settings, particularly when teams are uniting to identify solutions impacting the common good. In Chrislip and O'Malley's (2013) view, the common good is sharing accountability to solve a mutual concern affecting a broader group. A community engagement between a land-grant university providing agriculture-based education, and industry partners in agricultural services, emerges as a collaborative approach to these expectations. This approach shifts responsibility from a particular group to collaborate across sectors, strengthening the broader system by identifying a partnership to build a talent pipeline.

Problem Statement

Leaders from academia and organizations in the private sector, commonly referred to as industry, continuously seek solutions to prepare the incoming workforce with essential skills. For decades, the industry assumes that universities are primarily responsible for developing future

employees with necessary skills, presumably because universities offer students a venue for learning and skill-building (Seemiller, 2018). However, there is a general concern that graduates lack the "soft skills" necessary to lead and be successful in the job market (Gardner, 2018; Greenhaw & D'Abreau Denny, 2020; NACE, 2018). Soft skills are interpersonal traits that include communicating effectively and thinking critically (Chikeleze et al., 2018) and are among a comprehensive set of characteristics (verbal communication, evaluation, writing, analysis, and decision making) needed to enter the modern workplace (Seemiller, 2018). There is a growing need in our society to attract and retain unique expertise in a competitive job market. More importantly, future talent must arrive in the workforce ready to lead with essential skills (NACE, 2018). Therefore, employers can maintain a competitive edge by connecting with potential talent through relationships built within campus communities (NACE, 2020). Furthermore, a proactive approach to attracting talent will prepare future employees with the necessary skills before entering the workforce. This course of action will build a pipeline of experienced people and provide the employer with a competitive edge to attracting a highly talented, diverse workforce through engaged scholarship practices.

For this study, Figure 1.2 illustrates three phases of engaged scholarship: Phase I, forming a partnership with a community of practice; Phase II, creating a leadership development program; and Phase III, evaluating the program outcomes to ensure continuous improvement. Essentially the community of practice emerges to develop and evaluate a leadership development program. Each aspect impacts the creation and progression of opportunities to co-construct solutions in a supportive environment while also applying engaged scholarship practices.

Figure 1.2.

Phases to Support Engaged Scholarship
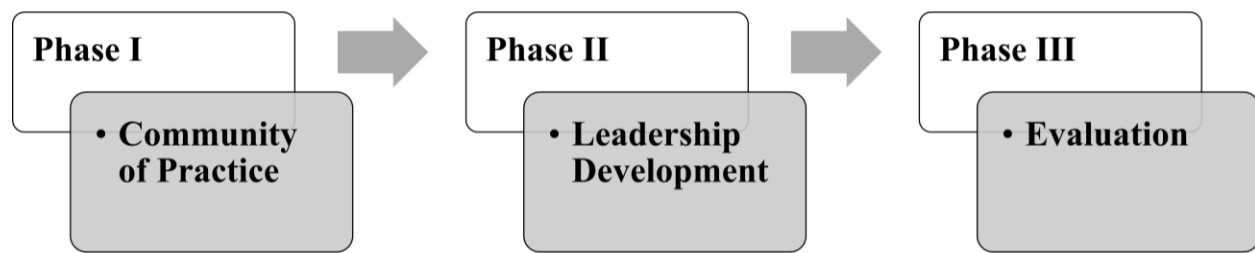
Phase I creates a community of practice (CoP). As part of the development and evaluation process, a CoP consists of academia representing a land-grant institution providing agricultural-based education and a corporate partner operating in agriculture. A CoP creates an environment of learning and providing solutions within a team (Wenger et al., 2002). The objective is to design and evaluate program content and delivery to improve the program continuously. Every team member can contribute and add value to the conversation by sharing their experiences and best practices on the topic.

Phase II encompasses a leadership development curriculum design and delivery by the CoP. The 70-20-10 framework offers a pathway to curriculum design. Researchers recommend leadership development programs incorporate the 70-20-10 principle; 70% of learning as experiential learning, 20% social learning, and 10% formal learning (Day & Liu, 2019; Johnson et al., 2018; Lombardo & Eichinger, 2017; McCall et al., 1988). The CoP can design content to meet each component's expectations within the framework to support a well-rounded approach.

Phase III reflects the process of evaluation. According to Umble (2007), "evaluation is the systematic collection and use of information to improve decisions." The CoP uses evaluation data to improve program content and delivery throughout the experience. Kirkpatrick and Kirkpatrick (2016) state, there are three reasons to conduct an evaluation, 1) enhance the program, 2) support an environment of learning, behavior, and results, and 3) assess the return on

expectations. An evaluation provides an outline for assessing the program created by the CoP. Each phase contributes to the efforts of developing a talent pipeline.

Through engaged scholarship, born is the Industry Fellowship program (IFP) to prepare and empower students to lead in the global community. The goal is to identify a cohort of multi-disciplined and diverse students (referred to herein as "Fellows") in their junior year and introduce them to leadership expectations through a series of experiences. This approach supports engaged scholarship by bringing expertise from academia and industry to developing a curriculum, facilitating activities, and evaluating the program.

Purpose Statement

The purpose of this study is to understand better how evaluation is leveraged to 1) improve IFP outcomes and 2) build a community of practice to advance community engagement. The collaboration between university and industry partners forms a CoP. The talent consulted for this study is a group of industry Fellows selected into the program for their potential leadership in the agriculture industry. The study's focus is to improve the quality and meet the outcomes of the IFP , leveraging Kirkpatrick's four-level model, and appreciative inquiry evaluative practices. Furthermore, evaluation is one way the CoP can clarify the impact of the IFP in developing others, and Kirkpatrick's four-level model offers a roadmap to generating a holistic approach.

In the late 1950's Dr. Donald Kirkpatrick introduced the four-level model as part of his dissertation (Kirkpatrick & Kirkpatrick, 2016), and it is a commonly used tool today (Boulmetis & Dutwin, 2005; McLean & Moss, 2003). The stages incorporate assessment of reaction, learning, behavior, and results (Kirkpatrick, 1998). To further improve this approach, appreciative inquiry is the second practice embedded in this work, helping surface themes identified by participants. According to Magruder Watkins (2011), Cooperrider and

Srivastva introduced the appreciative inquiry framework over 40 years ago, and it continues to evolve as a resource for driving change. It is a strength-based process of asking questions that increase respondents' engagement and interest (Cooperrider & Whitney, 2005; Preskill & Tzavaras Catsambas, 2006). Blending both evaluation models can lead to a deeper understanding of the program's experiences and growth.

The study seeks, as shown in Figure 1.3, a better understanding of how to leverage the process of evaluation in improving program outcomes, and as illustrated in Figure 1.4, lessons learned from the CoP as they embark on the journey of developing and evaluating a leadership development program. This study aims to understand how evaluation is utilized within a community of practice to develop a talent pipeline. The researcher explores how evaluation and research data inform a CoP and lessons learned by 1) understanding the Fellows' reactions to programming activities, 2) discovering the learning acquired after completion of program activities, 3) determining how the Fellows apply key learnings in their interaction with others, 4) observing the results through the offers of full-time employment, and 5) identifying the lessons learned from engaging a CoP in creating and evaluating a leadership development program.

Figure 1.3.

Evaluation Data to Improve the Quality of the Program
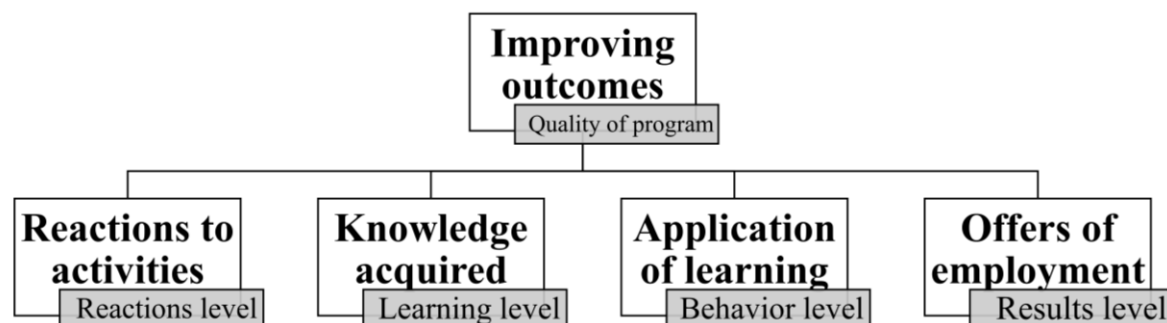
Figure 1.4.

Research Data to Illustrate Lessons Learned by the CoP
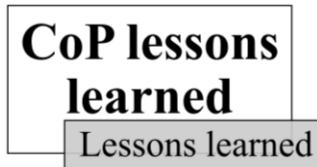
Research Questions

Main Question

How is evaluation utilized within a community of practice to develop a talent pipeline?

Sub-Questions

What type of evaluation data can inform a community of practice?

What were the participants' reactions to program activities?

What learning did participants acquire after completion of program activities?

What changes in behaviors did participants implement?

What are the results of the program relating to full-time offers of employment?

What are the lessons learned from engaging a CoP?

What is the process for creating and implementing a CoP to guide a leadership

development program?

Experiences, Assumptions, and Beliefs

Professional experiences within the private industry and higher education sectors influence the researcher's interest in creating and evaluating processes that aid others' growth in the workplace. While employed for a Fortune 500 company, the researcher quickly adapted to the culture of continuous improvement and developing others as the norm. Each day in a professional setting presented itself as an opportunity to apply those learning moments applicable

to professional growth. The researcher found it appealing to be a part of such an environment where the community learned from mistakes and acted to make improvements. Continuous feedback based on company competencies helped create a shared language and improve communication skills.

On the other hand, working at a land-grant institution demonstrates the importance of cross-functional relationships, particularly among teaching, research, and service. It also requires nimble responses. For instance, working on a policy or curriculum change impacts and would involve various disciplines. Therefore, the researcher adapted once more due to the differences in the layers of associations that required input on actions impacting the broader community. It is beneficial to engage multiple perspectives because it leads to better ideas and solutions, and the researcher, with experience in both work environments, is comfortable testing different scenarios that strengthen the desired outcomes. In academia, theories are more influential in decision-making, while in industry, best practices are persuasive in driving change. Therefore, a blended approach to applying theories and best practices is relevant to the researcher's concentration areas.

As a result of the researcher's experiences, the following assumptions occur: 1) every day provides a chance to learn something new and experiment with different solutions based on multiple realities, 2) the culture is curious and willing to test different scenarios without negative repercussions, and 3) innovation is a part of the broader system. Because of these assumptions, making systematic change is essential and serves as a driving force in the researcher's research interests. The goal is to be a part of a structure that values continuous improvement and is willing to take risks along the way to understand that it will benefit the broader system.

There are advantages to the goals, beliefs, and experiences listed above for this study. For example, there is a desire and interest to act and create a program that develops others, including blending evaluative approaches to measuring program deliverables. By contrast, this goal may lead to an excess amount of process improvement for a culture that is not prepared to manage frequent change. A benefit to the assumptions is that it allows for multiple voices in the evaluation process. On the other hand, this approach can be very time-consuming and lead to analysis paralysis. Finally, a combination of private and public sector experience can lead to a quicker understanding of both cultures and moving the initiative forward. The creation of a shared language can emerge and build trust with involved parties. However, it can be challenging to manage the partners' expectations from distinct cultures since both operate differently. Acknowledgment of the advantages and disadvantages of the goals, beliefs, and experiences is the first approach to progressing through the process.

Additionally, creating an open dialogue and building relationships with program participants at all levels aid in future evolution toward creating and sustaining meaningful change. The described above experiences, assumptions, and goals shape the researcher's interest in exploring engaged scholarship and contribute to the appeal of working with others to create and improve professional development opportunities for people preparing to enter the workforce.

Definition of Terms

For this study, the definition of critical terms consists of:

1. *Industry* is a private-sector corporation providing services in a field and operating in a global workplace. In this study, the term industry is used interchangeably with the phrase community.

2. *Engaged scholarship* brings together experts from the community with researchers to explore a shared concern and a desire to develop solutions for the common good through collaboration (Barge, 2016; Schockley Zalabak et al., 2017). Additionally, engaged scholarship provides an opportunity to enhance a relationship by co-creating content that supports a learning community (Barge, 2016; Barge & Schockley-Zalabak, 2008). The engagement creates a mutually beneficial relationship between both parties (Peter et al., 2006). According to Pearl (2014), a mutually beneficial relationship occurs when the faculty and community collaborate instead of the academic doing the community's work.

3. *Community of Practice (CoP)* provides a systematic approach to bringing others together to solve a mutual concern (Wenger et al., 2002). A CoP creates an environment of learning amongst a group of people who share their knowledge and experience to better others (Smith et al., 2019; Wenger et al., 2002). There are three foundations to a CoP: domain of knowledge, community of individuals passionate about the issue, and practice to improve the problem (Wenger et al., 2002). In this study, the university and industry partners serve as the coordinating members of the CoP responsible for designing and delivering program content.

4. *70-20-10* is a leadership development framework that offers a pathway to curriculum design. In the late 1980s, McCall et al. (1988) introduced the 70-20-10 concept. Researchers recommend leadership development programs incorporate the 70-20-10 principle; 70% of learning as experiential learning such as performing challenging assignments, 20% social learning conducted by coaching sessions, and 10% formal

learning through training (Day & Liu, 2019; Johnson et al., 2018; Lombardo & Eichinger, 2017; McCall et al., 1988).

5. *Evaluation* is a systematic way of acquiring, analyzing, and applying the information to make informed decisions to improve, assess, create action items for programs, and collaborate with stakeholders (Boulmetis & Dutwin, 2011; Mathison, 2005; Mertens & Wilson, 2019; Patton, 2017).

6. *Kirkpatrick's four-level model* provides a method for evaluating leadership development programs (Kirkpatrick, 1998). In the late 1950s, Dr. Donald Kirkpatrick introduced the four-level model as part of his dissertation (Kirkpatrick & Kirkpatrick, 2016). The stages incorporate assessment of reaction, learning, behavior, and results (Kirkpatrick, 1998).

7. *Appreciative inquiry (AI)* is a strength-based process of asking questions that increase others' engagement and interest (Preskill & Tzavaras Catsamas, 2006). AI creates a space for a systematic exploration of what is influential within a community (Cooperrider & Whitney, 2005). According to Magruder Watkins, 2011, Cooperrider and Srivastva introduced the AI framework over 40 years ago. It continues to evolve as a resource for driving change because AI explores the community's best to improve outcomes through five stages: define, discover, dream, design, and destiny (Coghlan et al., 2003; Cooperrider & Whitney, 2005; Magruder Watkins, 2011).

Summary

Engaged scholarship creates a systematic approach to utilize evaluation to improve a leadership development program designed to develop a talent pipeline. It is beneficial to blend theories and best practices from university and industry experiences. In the study, a strategic

approach to engaged scholarship includes three phases. Phase I involves the creation of a learning environment that embraces a CoP. Phase II encompasses identifying a leadership development program, i.e., the 70-20-10 framework that enhances learning through experiences, social, and formal education (Day & Liu, 2019; Johnson et al., 2018; Lombardo & Eichinger, 2017; McCall et al., 1988). Phase III embraces evaluation tools such as Kirkpatrick's four levels and appreciative inquiry. Community engagement provides an innovative framework to address the concern by bringing the university and industry together. Furthermore, it allows collaborators to learn from their experiences. While experiences vary, both partners seek to help prepare the future generation to enter the workforce.

Chapter 2 - Literature Review

Introduction

This review explores the current literature related to the theoretical frameworks and methods used that underpin this study. First, the section begins with a demonstration of the frameworks that support engaged scholarship through multiple paradigms. Second, the literature review explores engaged scholarship through various disciplines and strategic elements of community engagement impacting culture, diversity, and power. Specifically, the research explores the components to engage a CoP to create a leadership development program using the 70-20-10 framework. Third, the literature discovers various evaluation tools to exercise and support the program's continuous improvement culture. Kirkpatrick's four-level model and appreciative inquiry support the assessment to strengthen the partnership and meet program expectations. This section concludes with the construct of engaged scholarship and its relationship to the research question: how is evaluation utilized within a community of practice to develop a talent pipeline. Before exploring each topic further, a brief introduction to how each framework makes sense of the work follows.

In 1962, Thomas Kuhn first coined the term research paradigm and argued that it provides a disciplined framework to create new knowledge (Kuhn, 2012). In Weaver and Olson's (2005) view, "we understand paradigms to be mechanisms to bridge a discipline's requirements for knowledge and its systems for producing that knowledge" (p.460). In other words, it is how the group makes sense of reality. McGregor states, "after all, disciplines are communities of people, and paradigms reflect a group's commitment to a constellation of beliefs about viewing the world" (p. 7). McGregor's point is that paradigms are patterns and ways of

thinking within disciplines and communities. It helps identify how each partner group's paradigms operate and recognize the differences in engaged scholarship.

Acknowledging both the strengths and areas for growth in engaged scholarship increases awareness. By bringing together academia and industry partners to understand the questions around building a talent pipeline and resources needed to prepare the next generation with essential skills to lead, this study follows the practice of engaged scholarship. To proceed, Table 2.1 demonstrates an understanding of the lens through which the framework participates and makes sense of the experience.

Table 2.1.

Demonstrating Frameworks Supporting Engaged Scholarship Through Multiple Paradigms

Framework	Paradigm	Reality
Community of Practice	Constructivism	Multiple
Kirkpatrick four-level	Postpositivism	Single
Appreciative Inquiry	Social Constructionism	Multiple

First, engaged scholarship is a tool to help solve problems impacting society, and an exploration of more than one paradigm may maximize the results of an analysis of the environment. A paradigm offers multiple perspectives on operating within the system (Mertens & Wilson, 2019). A community of practice supports a constructionist viewpoint since it emphasizes multiple perspectives and prolonged involvement in the program (Mertens & Wilson, 2019; Ospina & Uhl-Bien, 2012). McNamee (2003) demonstrates that constructionism is how the community creates their perspective through social engagement. In making this assertion, McNamee makes the connection that the CoP creates a space to voice varying

viewpoints and merge a new belief system. In essence, in this study, the CoP works together to establish their new reality about developing a talent pipeline.

Second, merging two cultures may lead to tension given diverse viewpoints. For instance, in this study, the industry may lean towards the leadership development intervention's cause and effect when evaluating. Simultaneously, the academic may prefer to engage participants through meaningful dialogue and reflection to better understand the program's impact. In this example, the industry follows a postpositivist lens, while the academic's perspective is in the social constructionism lens. Postpositivism focuses on the causal relationships that explain and predict behavior changes (Greene, 1994; Ospina & Uhl-Bien, 2012), and Kirkpatrick's four-level model is within this purview. On the other hand, social constructionism emphasizes how we make meaning of different realities (Fairhurst & Grant, 2010; Kennedy et al., 2013; Magruder Watkins, 2011), and appreciative inquiry supports this approach. Leveraging multiple paradigms may meet the collaborators' needs and diffuse tensions about what is essential to assess.

Third, appreciative inquiry may benefit the collaboration in this study regarding lessons learned by exploring what is working well in the program. The CoP becomes familiar with the approach and inquires positively around change. These definitions connect the interplay between multiple paradigms and influence on engaged scholarship. According to Schultz and Hatch (1996), shuttling back and forth between paradigms provides an opportunity for flexibility and progress on significant connections. As shown in Figure 2.1, the community of practice is in the constructionist paradigm since it focuses on acquiring multiple perspectives. In contrast, the evaluation embraces the postpositivism and social constructionism paradigms because it assesses data in various ways. Working from within a constructionist paradigm and drawing on inspiration from engaged scholarship, it is essential to create a space for university and

community partners to discuss the problem and co-construct solutions to developing a talent

pipeline.

Figure 2.1.

The Interplay Between Multiple Paradigms
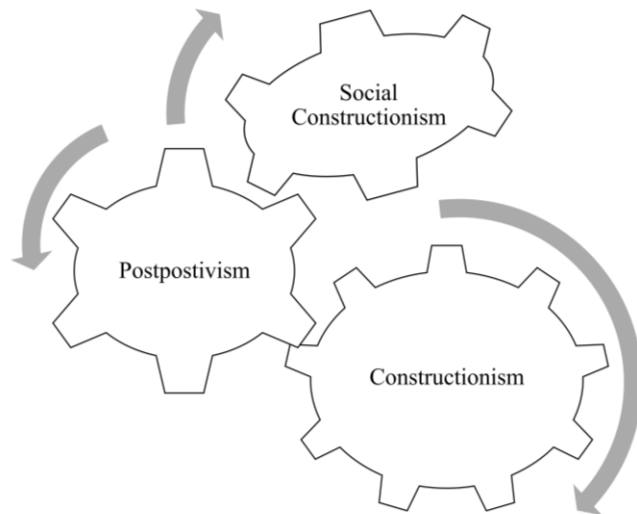
The interplay between multiple paradigms represents an approach to knowledge

construction that may help the engaged scholarship advance the research. Blending ways of

knowing can help understand each culture's perspective and serve as a guiding principle for

engaged scholarship. Sanchez et al. (2020) insist that a connection between paradigms facilitates

exchanging ideas and curiosity with varying ways of creating new knowledge. In this study, this

viewpoint is consistent with engaged scholarship and incorporates diverse disciplines to address

the research question.

Engaged Scholarship

This section incorporates practices from multiple disciplines including, management and

communication studies, to explore the theoretical frameworks and engaged scholarship elements.

Specifically, how engaged scholarship serves as the conduit for blending various cultures and

disciplines to focus on a problem. This explanation begins with a management perspective and then progresses to a communication studies viewpoint.

Management scholars Van de Van and Johnson (2006) frame five strategies to support the mutually-beneficial relationship in engaged scholarship: 1) design a project to address problems impacting the broader public, 2) create a collective learning community, 3) propose a prolonged timeframe, 4) explore multiple tools to manage the concern, and 5) revisit assumptions regarding roles and responsibilities. Engaged scholarship provides inventive solutions by integrating various disciplines and expertise from multiple fields (Van de Van and Johnson, 2006). In this research, these strategies enrich collaboration between university and industry partners.

Van de Van and Johnson's (2006) introduction of five strategies in which university and industry partners co-create solutions to the broader question fits this study. First, the project addresses the problem impacting the concern for lack of talent pipeline ready to lead in the agricultural field. Second, the project creates a CoP with diverse perspectives and experiences to exchange ideas and solutions to co-create and co-evaluate the leadership development program. Third, the CoP creates a three-year partnership to explore the topic, and they meet regularly to implement and evaluate solutions. Fourth, the project explores multiple methods to seek an answer to the research questions—specifically, a mixed-methods approach utilizing Kirkpatrick's four-level and appreciative inquiry evaluative tools. Finally, the university and industry partners build into the CoP the continuous improvement culture and test different assumptions and practices to help achieve the program's ultimate goal. This study incorporates multiple disciplines; therefore, further exploration of communication studies view is necessary.

For this study, reflecting on the communication scholar's perspective, engaged scholarship brings together experts in their various fields to learn about a shared concern while exploring solutions (Barge, 2016; Barge & Schockley-Zalabak, 2008; Schockley-Zalabak et al., 2017). In this case, bringing together individuals and experiences from academia and industry creates the practice of engaged scholarship. There are many advantages to this approach. First, a collaboration that engages various communities can contribute to diverse perspectives (Barge & Schockley-Zalabak, 2008). Second, both parties benefit from the relationship (Peter et al., 2006). In this sense, the relationship results in a learning community that can then ask questions to understand the issue better. Third, the engaged scholarship supports an interdisciplinary approach and includes many theoretical lenses (Schockley-Zalabak et al., 2017). In other words, an engaged scholarship approach can intertwine with various theories and best practices from different cultures when addressing complex issues.

Many problems are impacting the world today, and a desire to bring people together continues to evolve. The practice of engaged scholarship is a tool to do this, and understanding this activity becomes essential to making progress on these problems. Schockley-Zalabak et al. (2017) state, "engaged scholarship is motivated to understand practical questions and concerns" (p. 808), suggesting engaged scholarship provides a mechanism for identifying and resolving issues. Nelson and Dodd (2017) indicate there are three areas of focus when problem-solving with engaged scholars: 1) an analysis of the environment, 2) exploration of tensions when working with the community, and 3) identification of things that are going well. When working with partners, it helps to identify parameters to operationalize the collaboration, and Nelson and Dodd's (2017) focus areas serve as guiding principles for the CoP in this research.

According to Strier (2013), university and community partnerships are created with varying priorities, suggesting that universities approach the relationship to add new knowledge to the field, while industry pursues collaboration to advance their social commitments to the public. Furthermore, there is a broader concept impacting the partnership and may include tension in organizational structures and initial engagement, timing and academic calendars, and negotiating knowledge (Sandmann & Kliewer, 2012). In essence, the university lead balances the above-competing priorities within the academy and of the industry partner. Understanding the power dynamics within the relationship builds trust and sets expectations.

Blending management and communication perspectives frame engaged scholarship in this study. As previously explained, there are three phases to support engaged scholarship. First, the process begins with building a relationship between the university and industry collaborators to solve a challenging problem. Then, creating a CoP that embraces perspectives from management and leadership disciplines is phase one. This approach brings stakeholders together to create a learning community. The second phase, developing a leadership development curriculum, also comes from leadership studies and management fields. This project utilizes the 70-20-10 framework to advance this phase of development. Finally, the third phase is situated in the evaluation arena—specifically, Kirkpatrick's four levels and appreciative inquiry. Particular attention to each framework highlights how each step supports engaged scholarship to build a talent pipeline.

This study incorporates multiple perspectives of engaged scholarship to guide the research. It integrates a management lens and a communication studies view, consistent with merging diverse cultures. All viewpoints suggest that engaged scholarship is a collaborative process to address a complex issue (Schockley-Zalabak et al., 2017; Van de Van & Johnson,

2006). Therefore, engaged scholarship establishes a process for collaborators in diverse

disciplines and cultures to address broad and complex issues impacting society. In this case,

partners come together to address a concern and develop a talent pipeline. However, as the

partners navigate the problem, they should be aware of the perceived shift in power and

recognize how they make sense of the issue. As previously discussed, the phases to support

engaged scholarship are developing a community of practice, designing a leadership

development program, and evaluating the initiative's process and outcomes. In this study, the

next step is to engage others to develop a talent pipeline through a community of practice.

Community of Practice

University and industry can build upon existing practices within engaged scholarship to

engage the community. Community engagement emphasizes the value of building social capital

with groups before they begin to address concerns (Post et al., 2016). According to Putnam

(1995), social capital encourages individuals to come together and act towards a mutual goal. In

this case, university and industry partnerships can create a collaborative relationship to address

developing a talent pipeline. Collaborators in the newly formed partnership must consider

cultural factors and other external influences in identifying solutions; however, engaging a

community may help embrace and support meaningful and sustainable practices that lead to

workforce readiness. Operating within a constructionist paradigm, as described above, a CoP can

create the space for engaging the community.

Drawing on social learning theory (Omidvar & Kislov, 2014), a CoP creates an

environment of learning and solutions-focused outcomes (Wenger, 1998; Wenger et al., 2002).

For example, experienced people from academia and industry can join together to create a space

to share what they know about leadership skills forming a community of practice. Effective CoP

comprises people invested in resolving an issue while improving their knowledge and expertise through collaboration (Wenger et al., 2002). In this study, the CoP provides the opportunity to learn new information from others while acquiring multiple perspectives on developing talent. A leadership development program that blended partners' knowledge and expertise may lead to new ways of proactively preparing skilled talent (Palmer et al., 2016). If knowledge is to become the key to success, then the CoP can maintain its competitive edge by aiding in the growth of essential skills in future talent.

Furthermore, knowledge transfer to talent can lift entire industries where common problems exist. Obtaining the university and industry partners' perspectives to help prepare talent creates the space to understand better the essential skills needed and change. Raelin (2016) suggests the future of leadership shifts towards a collaborative agency that focuses on the community's role to provide solutions, instead of one individual identified as the leader. This process supports deliberative dialogue and encourages everyone to have a voice, inspiring collective decision-making for the community (Post et al., 2016).

As illustrated in Figure 2.2, three elements support a CoP: domain, community, and practice (Wenger et al., 2002). First, a domain consists of an action that creates a shared purpose and encourages sharing knowledge and experiences to better the learning community (McCormick & Dooley, 2005; Wenger et al., 2002). In this study, university and industry partners developing talent to enter the workforce are forming the domain. Second, a community comprises interactions amongst people committed to learning and collaborating (McCormick & Dooley, 2005; Wenger et al., 2002). University and industry partners demonstrate such a commitment to this study as they build trust and relationships through communication while developing a leadership development program. Third, a practice expects to explore how to

accomplish activities (McCormick & Dooley, 2005; Wenger et al., 2002). In this study, a

university and industry partnership identifies a leadership development framework for creating a

program and its components in each activity. Both parties engage in a learning community and

enhance their skills by designing and evaluating a leadership development program.

Figure 2.2.

Three Domains of a Community of Practice
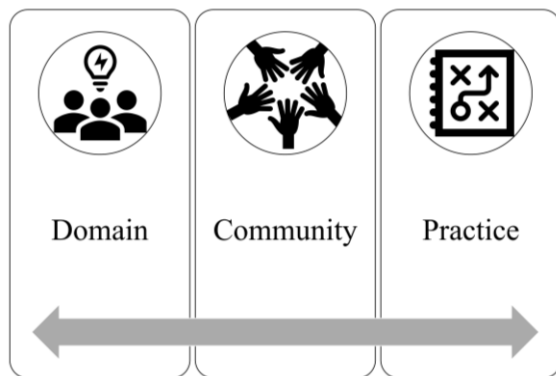
In another example, a southern land-grant university and industry partner that operates as

a multinational energy corporation identified a similar concern about the lack of talent available

to enter the field (Melvin et al., 2019). Both groups collaborated to build a partnership to shape

leadership curricula for students pursuing engineering degrees and later included business majors

(Melvin et al., 2019). The corporate partner initially sponsored a scholarship program for

engineering students, who each received $1000 to engage in the leadership academy annually,

starting their freshman year and continuing in their senior year. The students participate in

workshops, activities, and outreach to enhance their leadership skills while pursuing their

undergraduate degrees (Melvin et al., 2019). According to Melvin et al. (2019), the industry

partners expressed that the program was not meeting expectations, which led to a mentorship

component added to the experience. Also, the industry partner expressed a need to evaluate

students' development. The partnership routinely reviews the program outcomes and makes

improvements due to continued communication and commitment to preparing the future workforce (Melvin et al., 2019). The collaboration between the southern land-grant university and industry partner maintains the elements of a CoP. It shares a mutual concern impacting the industry and continues to seek new and innovative ways to improve the program's ability to develop a talent pipeline.

According to Arthur (2016), researchers express concerns with CoPs. For example, the lack of acknowledgment of the impact of power dynamics within the structure (Gherardi & Nicolini, 1998; Kislov et al., 2011). Power is a part of our daily interactions with others and the environments we operate (Foucault, 1977). Understanding power's impact determines how the CoP navigates and makes sense of their experiences. According to Fraser (1989), "Foucault enables us to understand power very broadly" (p. 18). In this case, the demonstration of power exists through the social interactions each time the CoP connects. The influence is evident in the dialogue or non-dialogue within the CoP. An important consideration is to recognize the perception of who has power in the community of practice. In this study, the perception of power is with the industry since they are sponsoring the program.

Nevertheless, according to Fraser (1989), in Foucault's view, power can be constructive. Wenger recognizes that learning can occur in many environments (Cousin & Deepwell, 2005), and Wenger (2010) states, "through active and dynamic negotiation of meaning, practice is something that is produced over time by those who engage in it" (p.180). Regardless of the power dynamics, the CoP creates an identity within the structure and learns from the experience.

Another critique is the inclusion of who participates in the CoP and the creation of sub-cultures within the learning community (Arthur, 2016; Cousin & Deepwell, 2005). In other words, participants may form smaller factions to build consensus on particular issues.

Contributors at different stages in their careers may offer varying perspectives and maintain evolving priorities. For example, experienced leaders may not be as familiar with the needs of early-career professionals. They may miss the opportunity to articulate the benefits of joining their organization, the program's goal. Therefore, the CoP should consider how they engage with program participants and develop action plans to address their concerns.

A CoP is creating a space for partners to engage in a learning community. In this case, partners come together to address a concern and develop a talent pipeline. However, as the CoP navigates through the problem, they should be aware of the perceived shift in power and recognize how they make sense of the issue. The CoP is one way to engage a community to develop a talent pipeline, and then the group proceeds to create a leadership development curriculum.

70-20-10 Framework

In the late 1980s, McCall et al. (1988) introduced the 70-20-10 concept for learning and development. Lessons learned from industry leaders suggest that learning occurs through a combination of experiential, social, and formal learning activities (Johnson et al., 2018; McCall et al., 1988). Illustrated in Figure 2.3, researchers recommend leadership development programs incorporate the 70-20-10 principle; 70% of learning as experiential learning such as performing challenging assignments, 20% social learning conducted by a coaching program, and 10% formal learning through training (Day & Liu, 2019; Johnson et al., 2018; Lombardo & Eichinger, 2017).

Figure 2.3.

Illustration of the 70-20-10 Framework

70% Experiential   20% Coaching   10% Training

The first part of the 70% rule is a stretch assignment. For instance, students in the IFP create the opportunity to learn from experiences in a supportive and challenging environment. Stretch assignments may include site visits to industry locations, case studies, and service-learning experiences. First, site visits communicate essential aspects of the industry and provide an opportunity for engagement with others. Through the progression of multiple site visits, participants can job shadow and better understand the organization's culture and values. Second, participating in a case study is considered a stretch assignment. It requires learners to confront difficult, complex problems with no single, obvious solution, allowing them to wrestle with challenges and help prepare them for workplace dilemmas. Third, service-learning is an experience to develop civic engagement skills by engaging in volunteer events in the community. Participants collaborate with others to identify opportunities and gain valuable experiences working with diverse individuals. These experiences contribute to the learning and advancement of a skill. One issue with stretch assignments is the individual's readiness and whether they can perform the work at the expected level (Day & Harrison, 2006); therefore, the practices should reflect the individual's ability and skillset. For example, the case studies should seek a balance between an undergraduate student's experience and knowledge and issues occurring in a professional setting.

The second aspect of the framework is that 20% of the time is social learning and engaging talent in a coaching program. Coaching in this program is an ongoing, confidential, one-on-one partnership to identify, prioritize, and achieve the individuals' desired goals. To embrace the CoP model, designated industry coaches receive training from university leaders on effective coaching practices. A benefit to this practice is expanding the concept of CoP and further engaging industry partners in continuous learning. Coaches help drive change and deepen

learning in a coaching program (Priest et al., 2018) through stretch assignments, feedback, or classroom learning. The purpose is to help them maximize their potential and to enhance personal and professional effectiveness.

For the program in this study, the CoP recommends that participants meet monthly for a minimum of 30 minutes with an industry coach between six-eight times annually. Feedback based on industry-specific competencies and addressing self-awareness issues leads to a better understanding of the industry culture (Lombardo & Eichinger, 2017), which may provide the Fellows with a competitive edge in the hiring process. A safe environment should exist for all Fellows before delivering and receiving feedback (Roupnel et al., 2019). Coaching is crucial to ensuring the participant is willing and able to receive feedback because they must act on identified strengths and areas of growth; otherwise, they may lose trust in the coach providing feedback. Coaching programs must build trust with the mentee, so it is crucial to consider matching similar career interests and experiences.

The third aspect of the framework is that 10% of learning is through training. Training can be beneficial; however, the program's effectiveness is essential to measure. Lombardo and Eichinger (2017) recommended that training only allows for 10% of developing leaders' responsibility. Training programs are focused on sharing solutions to identified problems (Day, 2010) and become advantageous if there is an immediate need to address an organizational issue such as learning policies and procedures. This model can be complicated when the training is messy and addressing complex problems. When a focus is on developing others to lead adaptive changes, a deliberative approach to significant learning must emphasize maximizing diverse leadership development methods. Successful programs that generate leaders' capacity in learning leadership enhance cross-functional teams (Day, 2010). Hence, introducing a leadership

lecture series to advance knowledge, skills, and abilities on emerging topics is the program's focus.

For the program in this study, a series focused on content that helps participants understand and apply leadership knowledge and skills reinforces personal and professional performance. The CoP identified four focus areas to enhance: leadership expectations, interviewing skills, inclusion and diversity, and emotional intelligence. It is imperative to introduce learners to experiences and shared dialect in the training sessions that help bridge the communication gap.

The CoP created content consistent with the 70-20-10 framework. The CoP used theories and best practices to identify experiential, coaching, and training elements that lead to developing a talent pipeline. The next step in the engaged scholarship journey is to recognize a mechanism for evaluating progress.

Evaluation

There are many distinctions between research and evaluation. For example, scholars suggest that research is about proving something, while evaluation focuses on improving something (Mathison, 2005; Patton, 2017). Mathison (2005) also states, "evaluation provides the basis for decision making; research provides the basis for drawing conclusions" (p. 189). It is essential to understand the differences and when to apply each approach. For this project, evaluation is a systematic approach to generate information for improvements (Patton, 2017; Russ-Eft et al., 2001).

Furthermore, researchers suggest the evaluation results may lead to continuous improvement to the program or the offering of new services (Russ-Eft et al., 2001). Regardless of approach, a mechanism to assess what is working well and what can be improved is a part of

organizational success (Kaufman et al., 1996). As with many disciplines, it is advantageous to understand the foundation of each approach.

In 1967, Scriven introduced the dichotomy of evaluation roles: formative and summative (Chen, 1996; Patton, 1996; Scriven, 1967; Scriven, 1996). Formative evaluation is conducted after activities to refine program content, delivery, and participant experience (Boulmetis & Dutwin, 2011; Davidson, 2004; Mertens & Wilson, 2019; Patton, 2017). In other words, formative evaluation discovers strengths and growth areas. In comparison, a summative assessment measures the outcomes (Boulmetis & Dutwin, 2011; Davidson, 2004; Mertens & Wilson, 2019; Patton, 2017). In short, summative evaluation occurs at the end of the program. Chen (1996) argued that Scriven's definitions do not include other evaluation types and present evaluators with two options. By contrast, Scriven offers two basic choices (formative and summative) to conduct an evaluation, while Chen suggests there are various other types of assessment.

Chen (1996) introduced an enhanced model of the primary and mixed types of evaluations, illustrated in Table 2.2, emphasizing the program stages: process and outcome by functions: improvement and assessment. Chen (1996) explains that process-improvement focuses on strengths and areas of growth or aids in decision-making, while process-assessment focuses on merit. Outcome-improvement concentrates not only on strengths and areas for development but also on how those areas affect the outcome (Chen, 1996). According to Chen (1996), the last type is outcome-assessment, and it emphasizes if the program reached its purpose. A mixed style incorporating formative and summative evaluation would complement an adaptive model for evaluating a leadership development program since it assesses multiple categories.

Table 2.2.

Basic Types of Evaluation

		Functions	
		Improvement	**Assessment**
Process		Process-Improvement Evaluation	Process-Assessment Evaluation
Outcome		Outcome-Improvement Evaluation	Outcome- Assessment Evaluation

Program Stages (vertical label)

In this study, using multiple forms of assessment allows for continuous improvement in program content and highlights participants' experiences and growth. Therefore, Figure 2.4 demonstrates Chen's (1996) blending of program stages and evaluation functions. Chen (1996) suggests sequential integration, which recommends that one evaluation occur first before implementing another. In this study, after each activity, the Fellows provide feedback to support continuous improvement, and after the program, a focus group assesses the outcome. As a program progresses, it must be clear to the CoP why they are conducting an evaluation.

Figure 2.4.

Blending Multiple Types of Evaluation
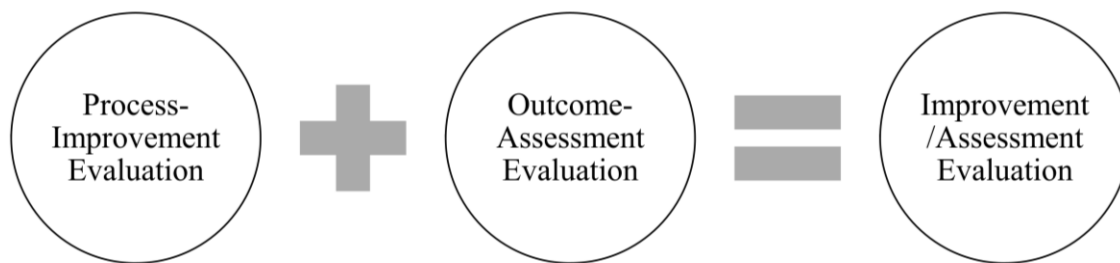
Chen (1996) advocates that there are three benefits to blending multiple types of evaluation: 1) provides continuous improvement to stakeholders, 2) meets the needs of diverse stakeholders, and 3) delivers detailed content regarding the program. In this research, the CoP sought to evaluate each aspect of the program and make improvements along the way. Next, this approach balances the needs of the different participants within the CoP (university and industry)

and Fellows by incorporating their insight and feedback. Finally, the industry partners receive an evaluation report to share with other departments within the organization.

Furthermore, according to Kirkpatrick and Kirkpatrick (2016), there are three reasons to conduct an evaluation: enhance the program, support an environment of learning, behavior, and results, and assess the return on expectations. Collaboration should emphasize and connect the expertise of industry and university stakeholders. In this study, industry partners have a culture of creating a project plan that illustrates goals, activities, and results of how a leadership development program can prepare students to lead. Within the CoP, the university representative suggests a research-based framework to guide and recommend a change theory to support the infrastructure. Therefore, meeting the expectations of both cultures.

A theory of change (ToC) explains the pathway of how stakeholders, resources, and activities bridge the gap to reach the outcomes of the program (Mertens & Wilson, 2019; W K Kellogg Foundation (WKKF), 2004) and as shown in Figure 2.5, introduced if and then statements (Buitrago, 2015). McLaughlin and Jordan (2015) conclude, "if a program is implemented as planned, then certain results are expected to follow, given the context within which it is implemented" (p.63). Patton (2017) states, "a theory of change must explain why the activities produce the outcomes" (p. 6). This framing is consistent with the expectations of a CoP and offers a path to communicating effectively amongst the collaborators. Additionally, it begins to create a shared language within the CoP to drive change.

Figure 2.5.

Theory of Change Illustration of If and Then Statements
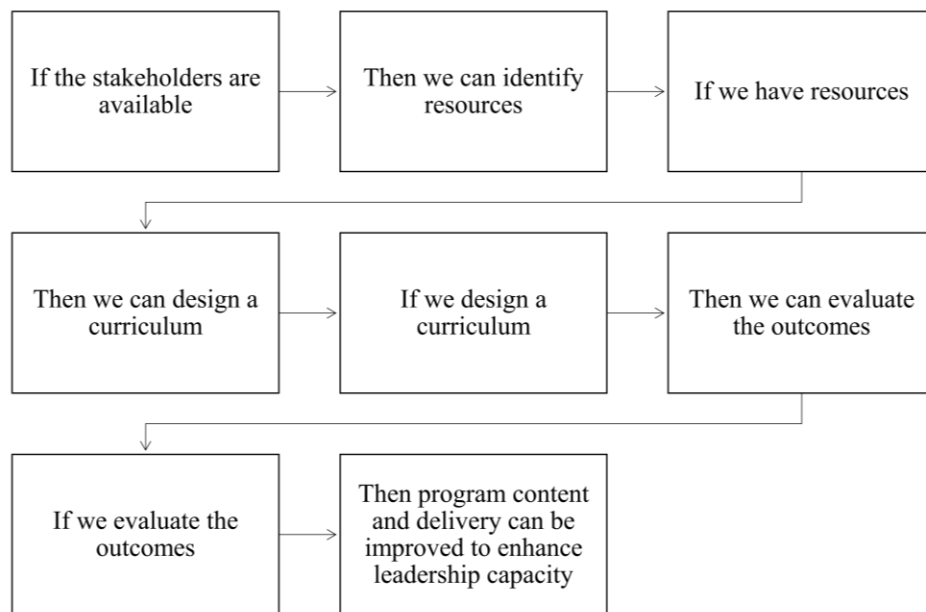
The logic model helps explain the story and depicts the ToC (Mathison, 2005; McLaughlin & Jordan, 2015; Mertens & Wilson, 2019). As shown in Figure 2.6, a logic model can simplify a program's complexity by illustrating the work to accomplish through stakeholders, resources, and activities, and the output, outcomes, and impact reflect the anticipated results (Mathison, 2005; Russ-Eft & Preskill, 2005; WKKF, 2004). The logic model serves as a visual roadmap through the six elements listed above to communicate stakeholders' journey.

Figure 2.6.

Intended Work and Anticipated Results Depicted in a Logic Model
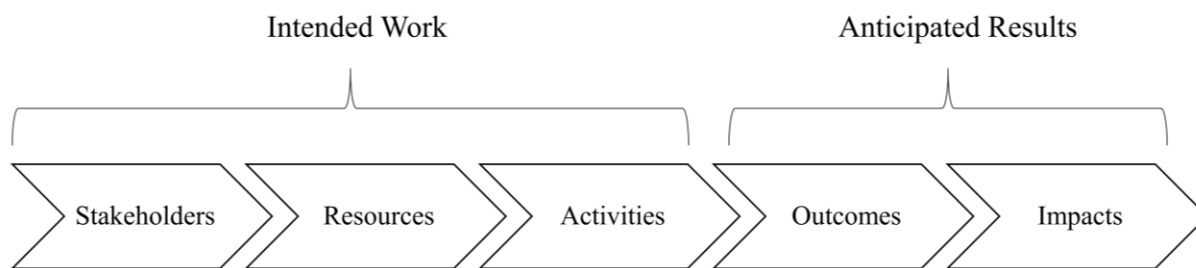
First, Bryson and Patton (2015) recommend a thorough analysis of stakeholder contributions by identifying and engaging key stakeholders. For instance, who has the knowledge, skills, or abilities to prepare the incoming workforce with the essential skills to lead, and what resources do they provide to the project? Second, assessing resources and how they contribute and impact the outcome is vital (Russ-Eft & Preskill, 2005). Third, activities are the events that lead to the outputs (McLaughlin & Jordan, 2015). A CoP, 70-20-10 leadership development framework, and evaluation practices support the strategies that foster collaboration through a community of practice, create a curriculum and evaluation process to inform continuous improvement, and develop a common language with stakeholders that drive the initiative. Fourth, outputs usually represent quantifiable data of services provided to participants (McLaughlin & Jordan, 2015). For instance, the experience indicates 1) how many members develop curriculum and evaluate the efforts, 2) how many participants, and 3) how many and what types of interventions. Fifth, programs may reflect short-term and medium-term outcomes (McLaughlin & Jordan, 2015). Lastly, the impact is the long-term aspiration of the program. The logic model also explores assumptions and external factors that influence the program.

The logic model serves as a living document to hold the stakeholders accountable and an opportunity for refinement. It represents the assumptions that are contributing factors throughout the program, from beginning to end. Additionally, it supports the ToC, which is the pathway to aspirational results.

Watkins et al. (2011) suggest the ToC strengthens the case for evaluating leadership development using learning outcomes. They assessed a four-month executive leadership development program at a global health company based in the United States, which collected

information from participants, peers, and supervisors through in-depth interviews six and 12 months after the intervention (Watkins et al., 2011). Concerning program outcomes, the following themes emerged: professional growth, a beneficiary of job offers, establishing a common language, and investment in others (Watkins et al., 2011). Additionally, Watkins et al. (2011) reported the value of the experience by "being selected, being part of a talented cohort, engaging in the global village of the organization and producing valued outputs for key stakeholders" (p 223). This finding is key to the IFP because the participants are similarly recruited and selected amongst talented peers and engage in cross-functional teams to problem-solve complex issues. Researchers suggest a crucial implication is underestimating value in establishing a common language, building community, and strengthening communication between the group, which is one of the program's desired outcomes (Watkins et al., 2011).

Evaluations of training, including surveys to assess the satisfaction of experiences, acquired knowledge, and changes in behaviors after completing each program component, are situated in a postpositivist paradigm. In contrast, evaluations that determine the multiple shared understandings reflect social constructionism. Using these various forms of assessment sheds light on participants' experiences and growth and supports the belief that one reality exists. For instance, the IFP evaluates if the participants' acquired new knowledge after participating in the leadership lecture series, case study, and site visits. This multitier approach is essential to deepen understanding of how leadership development interventions impact workforce preparedness.

The CoP preferred evaluation since it focused on continuous improvement and outcomes of the IFP. Hence, Chen's (1996) approach to blending evaluation types consistent with process improvement and outcome assessment is attainable. Evaluation of a program can effectively merge the expectations of both cultures in the CoP. After all, the CoP brings their workplace

culture, mindsets, resources, and tools that serve them well. For example, in this study, the industry expects strategic planning to occur, while the university partner introduces a logic model to illustrate the plan. Both aspects support the ToC by embracing continuous improvement. The CoP can lean on multiple tools to assess the program, in this case, Kirkpatrick's four-level model and appreciative inquiry evaluative practices.

Kirkpatrick Four-Level Model

In the late 1950's, Dr. Donald Kirkpatrick introduced the four-level model as part of his dissertation (Kirkpatrick, 1998; Kirkpatrick, 2008; Kirkpatrick & Kirkpatrick, 2016), and it is a commonly used tool today (Boulmetis & Dutwin, 2005; McLean & Moss, 2003). Kirkpatrick introduced a goal-based (Fullard, 2007) evaluation model to assess learning and development programs' effectiveness and is part of a postpositivist paradigm. As shown in Figure 2.7, there are four stages: reaction, learning, behavior, and results, that provide a process to evaluate each level of the program (Kirkpatrick, 1998). The model began with four steps typically occurring in ascending order from reaction to results (Kirkpatrick, 1998); however, its evolution to levels supports each stage's blending in an evaluation (Kirkpatrick & Kirkpatrick, 2016). The ability to assess more than one step simultaneously is efficient and avoids multiple assessments, leading to survey fatigue (Kirkpatrick & Kirkpatrick, 2016).

Figure 2.7.

Kirkpatrick Four-Level Model

Kirkpatrick's model evaluates outcomes in four stages. First, the reaction stage measures participants' satisfaction after completing content (Boulmetis & Dutwin, 2011; Fullard, 2007; Mertens & Wilson, 2019) and can evaluate experience through a series of questions. Secondly, the learning stage is an opportunity to assess the knowledge gained after completing program content (Boulmetis & Dutwin, 2011; Kirkpatrick & Kirkpatrick, 2016; Steenma & Groeneveld, 2010). In this stage, an evaluation of the learning outcomes and self-reflection occurs. Third, the behavior stage focuses on influencing behaviors (Boulmetis & Dutwin, 2011; Kennedy et al., 2013; Kirkpatrick & Kirkpatrick, 2016) and assessed self-reflection. The final step, results, is focused on the program's impact on the desired outcome (Boulmetis & Dutwin, 2011; Kennedy et al., 2013; Mertens & Wilson, 2019) and measures the conversion of talent to join the industry. The university and industry leaders' involvement in evaluating the program provides a routine and relevant improvement, which benefits the CoP and growth of the Fellows.

In discussions of Kirkpatrick's four-level model is an exploration of critiques regarding the terminology used to explain the tool. Newstrom (1995) contends the failed distinction of Kirkpatrick's four-levels between a model or taxonomy. Newstrom (1978) argues that the initial model appears to progress through each level sequentially, as illustrated in Figure 2.8 and that evaluations start with measuring participant reactions before proceeding to assess learning. However, nothing prevents practitioners from adapting the model to meet their evaluation needs. For example, the reaction and learning stage can focus on improvements, while the behaviors and results assess the program's impact.

Figure 2.8.

Perceived Hierarchy of Kirkpatrick's Four-Level Model
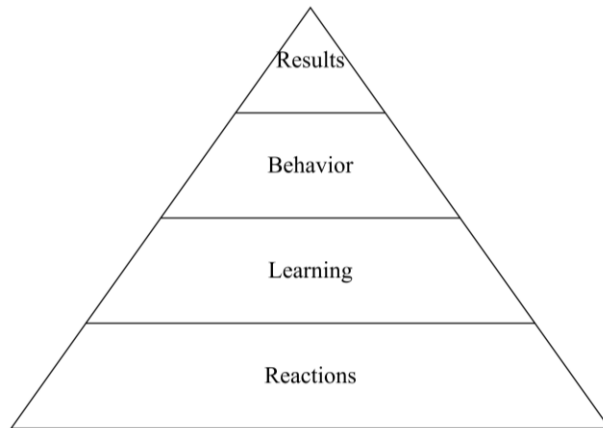
Another debated issue is the difficulty of measuring levels three and four due to external influences and experience, hence the inability to state a cause and effect and provide a thorough explanation of data collected (Kaufman & Keller, 1994). Kaufman and Keller's (1994) point is that there are competing activities on individual performance beyond a training intervention. However, by assessing the impact of the training one time, Kaufman and Keller overlook the opportunity to measure the outcome over time.

The last criticism addressed is the focus on results level. Russ-Eft and Preskill (2005) express, "it makes evaluation clients and stakeholders believe that the best evaluations are those that examine the ROI to some intervention, program, or process" (p. 72). Russ-Eft and Preskill (2005) emphasize the difficulty of equating satisfaction levels with financial implications. The argument's essence is that it is challenging to measure a particular aspect of the program's economic impact. On the other hand, researchers Kennedy et al. (2013) conducted a study on the usage and understanding of Kirkpatrick's level three and four evaluations. Kennedy et al. (2013) found that training professionals do not measure these areas due to a lack of organizational support, resources, and evaluation expertise. The essence of Kennedy et al. (2013) argument is

that training professionals focus on measuring the intervention's reaction and learning levels. However, Kirkpatrick (1998) argues, "we have to be satisfied with evidence instead of proof" (p. 69). Yet, another reason to focus on more than one level of learning at any given time. Thus, for this study, the following recommendations occur, 1) utilize a blended level evaluation, 2) identify key performance indicators, and 3) review similar programs using Kirkpatrick's four-level model.

McLean and Moss (2003) conducted a case study on a pilot program for non-credit leadership development with 30 professionals from the agri-food industry. Participants embarked on an 18-month curriculum designed to enhance their learning, skill-building, and networking through seminars and 360-degree feedback. Researchers conclude that Kirkpatrick's four-level framework met the needs of assessing a formative evaluation process concerning participant reactions and learning; however, there was insufficient evidence that the program led to changes in behaviors and results (McLean & Moss, 2003). McLean and Moss (2003) came to this conclusion by 1) evaluating the reaction and learning after each of the six seminars; 2) surveying participants' satisfaction, learning, behaviors, and results at the mid-year, end of the program, and post-follow up two years later; and 3) engaging in a Leadership Practices Inventory with a 360-degree feedback component to support accounts of changes in behaviors. McLean and Moss (2003) assert that Kirkpatrick's four-level model provides a practical approach to gathering information about a leadership development program's effectiveness.

Researchers Steensma and Groenveld (2010) performed an experimental design for a five-day leadership and management training with 27 professionals in the treatment group and 27 participants in the control group. The control group represented individuals who were on a waiting list for the intervention. The program focused on teaching practical communication skills

between leaders and direct reports through workshops and personal inventories: Learning Styles and Locus of Control. The four-level model measured reaction, learning, behaviors, and results at six points: the gathering of baseline data before training started, day one of training (Learning Styles/Locus of Control), after completion of training, one week later, 30-day follow-up, and 90-day follow-up. Steensma and Groeveld (2010) concluded a statistically significant difference between the treatment and the control groups in all four-levels.

Kirkpatrick's four-level model is an established tool to evaluate leadership development programs. The model provides the opportunity to measure reactions, learning, behaviors, and results. While the model has some critiques, it is essential to acknowledge that a blended approach is beneficial for this project.

Appreciative Inquiry

An additional resource of evaluation is an appreciative inquiry framework. According to Magruder Watkins (2011), Cooperrider and Srivastva introduced the AI framework over 40 years ago, and it continues to evolve as a resource for driving change. Coghlan et al. (2003) advance this discussion by writing, "appreciative inquiry is an approach to seeking what is right in an organization in order to create a better future for it" (p. 5). In other words, appreciative inquiry provides a mechanism to explore what is working well and supports the practice of continuous improvement. There are five appreciative inquiry components shown in Figure 2.9: define, discover, dream, design, destiny (Cooperrider & Whitney, 2005; Hammond, 2013).

Figure 2.9.

The 5-D Cycle of Appreciative Inquiry Begins with the Define Stage
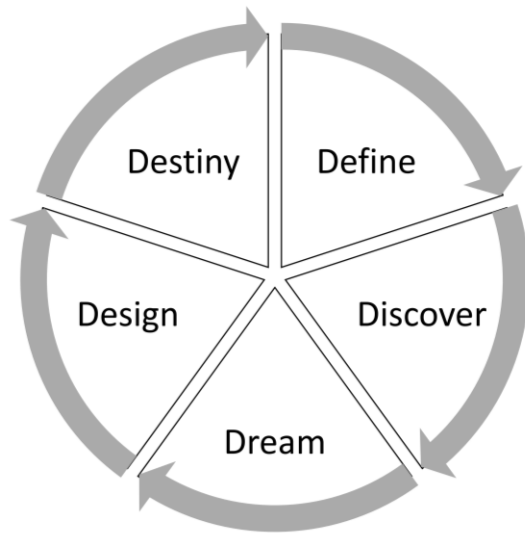
In the 5-D cycle, the team starts identifying a topic or exploring what to inquire about in the define stage (Hammond, 2013). Second is the progression to discover the best of what is (Cooperrider & Whitney, 2005; Hammond, 2013). Third, dream about the possibilities (Coghlan et al., 2003; Cooperrider & Whitney, 2005; Hammond, 2013). Fourth, the design stage focuses on the future (Coghlan et al., 2003; Cooperrider & Whitney, 2005; Hammond, 2013). Finally, the destiny stage invites action inspired by the previous steps (Cooperrider & Whitney, 2005). The five stages of appreciative inquiry provide a roadmap to guide the continuous improvement process through facilitation.

Practices of appreciative inquiry are examples of dialogic discourse, which focuses on leaders' rhetoric to communicate (Carroll et al., 2015). For instance, a facilitator may mobilize others to co-create solutions by providing a space to share previous experiences of success. The leader may utilize the appreciative inquiry model, where she asks a question; Tell me about a time you participated in a training where the facilitator created an engagement environment. What made it a supportive learning atmosphere? According to social constructionism,

appreciative inquiry can lead to a positive change in the relationship (Marshak & Grant, 2008) and strengthen the partnership with intentional and purposeful intervention through discourse. In Fairhurst and Grant's (2010) view, "appreciative inquiry recognizes the power of language to help construct a more positive, life-affirming way to lead organizations" (p. 185). The model is a tool to strengthen the communication between participants. It serves as another learning experience because individuals observe a different way to be curious and frame questions to seek input from others positively. A review of other similar programs may be helpful.

Hanson Smart and Mann (2003) suggest that the theory of change supports appreciative inquiry as a method to make sense of connections between activities and outcomes in a logic model. They evaluated a youth development program, which blended survey data collected over three years and then introduced a focus group practicing appreciative inquiry at the end (Hanson Smart & Mann, 2003). Researchers Hanson Smart and Mann (2003) reported the quantifiable data indicated an increase in the sense of belonging and improved respondents' capacity to help others due to the program. The appreciative inquiry focus group provided the stories to support previous findings further. A concern with a strength-based approach to ask questions about experiences is the perception that the facilitator is avoiding addressing weaknesses or concerns; however, in this evaluation, the focus group was only one tool leveraged. Hanson Smart and Mann (2003) demonstrated the benefits of blending evaluative mechanisms and that appreciative inquiry captures positive experiences and growth areas.

Critiques about appreciative inquiry are important to consider. A typical concern is that this approach will avoid surfacing problems since it is solution-focused (Tzavaras Catsabas & Webb, 2003). While this may be prevalent in an evaluation only using appreciative inquiry, it is

just one approach to gathering responses for this study. Furthermore, Jacobsgaard (2003) found that some problems were more comfortable to address leveraging appreciative inquiry when evaluating an organization supporting trauma victims. After reviewing several studies, Patton (2003) suggests that the dream stage questions have the most potential for achieving balance. There is something of value to learn from this criticism; however, merging AI and Kirkpatrick's four-level evaluative tools addresses the researcher's optimistic nature.

Appreciative inquiry is a solution-focused evaluation tool. There are five stages (define, discover, dream, design, and destiny) in the AI cycle. While there is a concern that AI positively frames questions to evaluate problems, leading to a lack of understanding of concerns, researchers suggest the opposite and found that AI captures positive experiences and growth areas.

Summary

This review explored current literature related to the theoretical frameworks and incorporated the three phases from various disciplines to support engaged scholarship. Based on management and communication scholars' perspectives, engaged scholarship is about building relationships to address societal problems (Barge, 2016; Barge & Schockley-Zalabak, 2008; Schockley-Zalabak et al., 2017; Van de Van and Johnson, 2006). This paper suggests that an interplay between multiple theories and practices aid in blending diverse cultures and introduced three phases to support engaged scholarship: a community of practice, leadership development, and evaluation. First, stage one creates a CoP and blends various disciplines and cultures. The social payoff benefits the CoP and their understanding to discover strengths and growth areas in the IFP. Second, stage two develops a leadership development program utilizing the 70-20-10 framework. Additionally, the CoP engages in a learning community and acquires new knowledge

about developing and evaluating a leadership development program for emerging leaders. Last, stage three embraces assessing the program outcomes using Kirkpatrick's four-level model and appreciative inquiry. Blending both evaluative tools leads to a more robust assessment of the IFP and meets the CoP's expectations. The identified approach lays the foundation for understanding how evaluation is utilized within a community of practice to develop a talent pipeline.

Chapter 3 - Methodology

Introduction

The purpose of the study is to understand how to leverage the evaluation process to 1) improve IFP outcomes and 2) build a community of practice to advance community engagement. The study seeks to understand how to leverage the process of evaluation in improving program outcomes and discover lessons learned from the CoP as they embark on the journey to developing and evaluating the IFP. This section includes an introduction that connects the engaged scholarship approach and the stages (CoP, 70-20-10 framework, and evaluation) to support the process. The research questions explore how evaluation is utilized within a community of practice to develop a talent pipeline. There are additional sub-questions to support the exploration of the research question. The study design consists of quantitative and qualitative, or mixed-methods, to help answer the research question. Then, the sampling procedures involve a single-group post-test only design of participants in the IFP. The following chapter describes data collection for the study, which incorporates online surveys, virtual focus groups, review of field notes, and other program documentation. The analysis approach consists of descriptive data and coding of emerging themes. An explanation of the ethical considerations and limitations of this study follows. In conclusion, a summary reiterates the methodology used to address the research questions.

Research Questions

Main Question

How is evaluation utilized within a community of practice to develop a talent pipeline?

Sub-Questions

What type of evaluation data can inform a community of practice?

What were the participants' reactions to program activities?

What learning did participants acquire after completion of program activities?

What changes in behaviors did participants implement?

What are the results of the program relating to full-time offers of employment?

What are the lessons learned from engaging a CoP?

What is the process for creating and implementing a CoP to guide a leadership development program?

Study Design

The pilot IFP informs the researcher's dissertation. The Committee on Research Involving Human Subjects/Institutional Review Board (IRB) approved protocol #9869.1 (Appendix C) to proceed with data collection. The mixed-methods evaluation consists of quantitative and qualitative approaches to understanding how to leverage the evaluation process to 1) improve IFP outcomes and 2) build a community of practice to advance community engagement.

As shown in Figures 3.1 and 3.2, the study aims to better understand how to leverage the process of evaluation in improving program outcomes and discover lessons learned from the CoP as they embark on the journey of developing and evaluating a leadership development program. This study seeks to understand how evaluation is utilized within a community of practice to develop a talent pipeline. The researcher explores how evaluation data inform a community of practice and lessons learned by 1) understanding the Fellows' reactions to programming activities, 2) discovering the learning acquired after completion of program activities, 3) determining how the Fellows apply key learnings in their interaction with others, 4) observing the results through the offers of full-time employment, and 5) identifying the

lessons learned from engaging a CoP in creating and evaluating a leadership development

program.

Figure 3.1.

Evaluation Data to Improve the Quality of the Program

```
                        ┌─────────────────────┐
                        │     Improving       │
                        │     outcomes        │
                        │  ┌────────────────┐ │
                        │  │Quality of program│ │
                        └──┴────────────────┴─┘
        ┌────────────────┬──────────┴─────────┬────────────────┐
┌───────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│ Reactions to  │ │  Knowledge   │ │ Application  │ │  Offers of   │
│  activities   │ │  acquired    │ │ of learning  │ │ employment   │
│ ┌───────────┐ │ │ ┌──────────┐ │ │ ┌──────────┐ │ │ ┌──────────┐ │
│ │Reactions level│ │ │Learning level│ │ │Behavior level│ │ │Results level │
└─┴───────────┴─┘ └─┴──────────┴─┘ └─┴──────────┴─┘ └─┴──────────┴─┘
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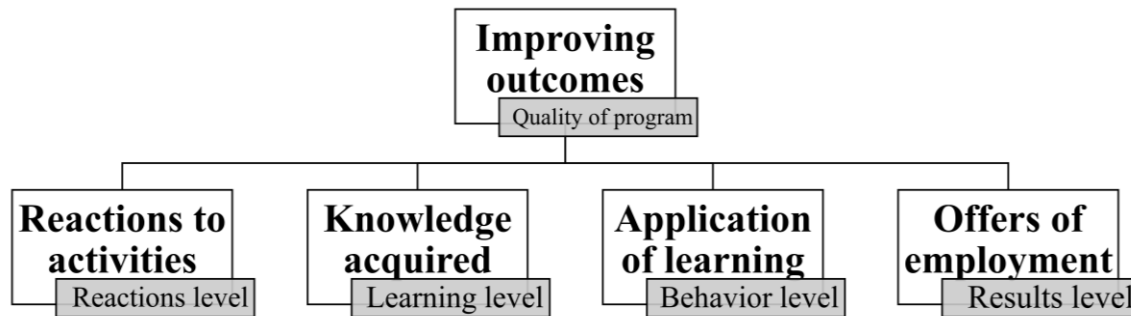
Figure 3.2.

Evaluation Data to Illustrate Lessons Learned by the CoP

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┌─────────────────┐
│  CoP lessons    │
│   learned       │
│ ┌─────────────┐ │
│ │Lessons learned│ │
└─┴─────────────┴─┘
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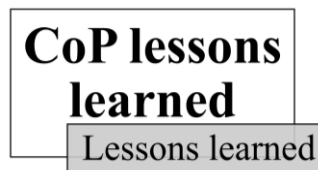
This study followed two timelines. The first timeline, Figure 3.3, illustrates the timeline

of essential planning components. The timeline begins with engaging the community through a

CoP and concluding with program planning.

Figure 3.3.

Timeline of Critical Program Planning

● **Engage community of practice**
      ● **Identify participants in the program**

Mo	Mo	Mo	Mo	Mo	Mo	Mo
1	2	3	4	5	6	7

A

   B C

D

      ● **Program planning**
    ● **Pre-program activities**

Note. Adapted from Evergreen, S. D. H. (2020).

48
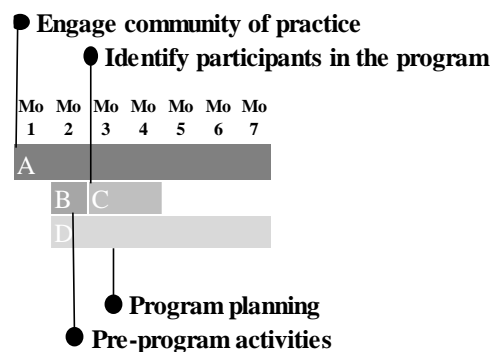
The second timeline, Figure 3.4, demonstrates the necessary program activities. Engaging the CoP is consistent throughout both timelines. A further explanation is provided for each category to support the program.

Figure 3.4.

Timeline of Critical Program Activities
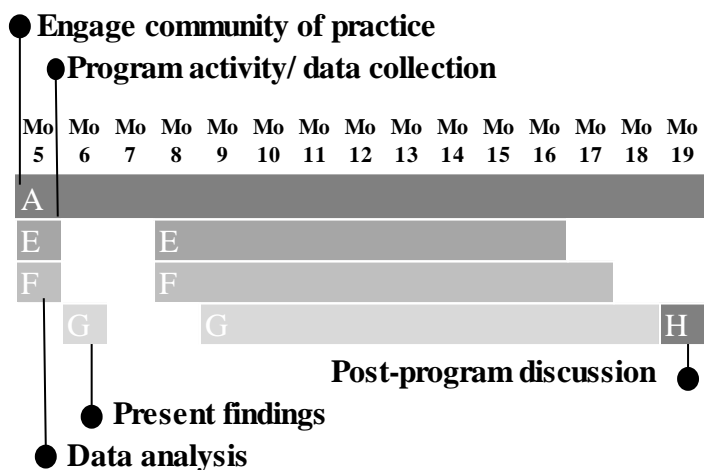
Note. Adapted from Evergreen, S. D. H. (2020).

The first step is to identify stakeholders who can join the community of practice, which should occur in month one. The stakeholders should encompass expertise from university and industry who share a mutual vision to developing others. These professionals can contribute by reflecting and sharing key learning moments. It is essential to build trust and establish a common language to help strengthen communication efforts. For example, industry partners may introduce their competency modeling framework and processes to support the initiative. Investing the time upfront to speak a common language may bridge the gap in future communication.

As part of the development and evaluation process, a CoP is established and engages the community consisting of the university and industry partners. The objective is to design and provide feedback on program content, delivery, and evaluation. Figure 3.5 demonstrates that the

CoP participates in one of two sub-teams. Each sub-team has an industry leader responsible for setting the monthly agenda items with the university program lead.

Figure 3.5.

The Teams Supporting the Community of Practice
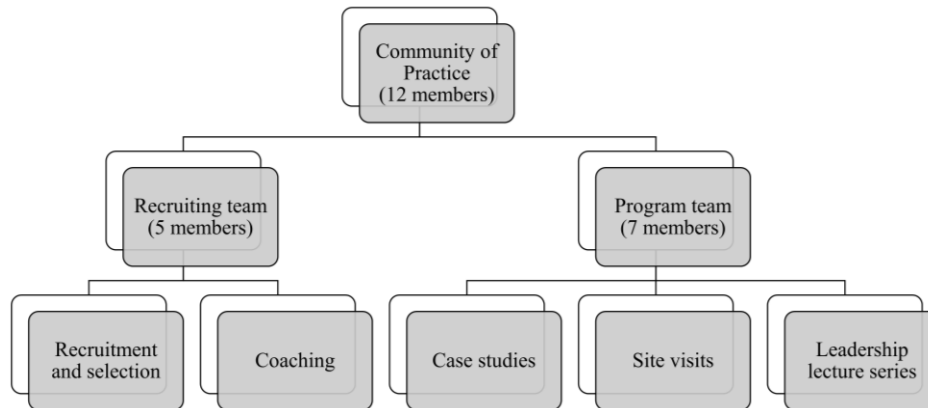
A recruiting sub-team directs the recruitment and selection of participants and internships and coaching components. There are three main priorities for the recruitment and selection team. First, the team creates a plan to attract a broad group of students to the program, and then they interview and select Fellows to join the IFP. Second, they aid in the networking events for the industry recruiters and Fellows before internship interviews. Third, the team is responsible for identifying and training industry coaches. Each coach created a brief bio and paired it with a student based on similar backgrounds and career interests. The university is responsible for preparing the industry coaches on how to coach Fellows. Consistent with the 70-20-10 framework, the coaching program comprises 20% of the IFP.

In contrast, the program sub-team focuses on developing case studies, site visits, and leadership lecture series, and both teams meet individually monthly. The case studies focus on relevant topics that lead to critical thinking, and the site visits provide an opportunity to job shadow and interact with the industry. The leadership lecture series addresses pertinent matters supported by the university and industry values: inclusion and diversity. An annual program

calendar is created and distributed at the start of the IFP. Consistent with the 70-20-10 framework, 70% of activities (case studies and site visits) developed are experiential, and 10% is training occurring within the leadership lecture series. The CoP, comprised of both sub-teams, meets quarterly and designs the outcomes.

The two sub-teams have monthly agenda items identified as feedback, action, and information categories to improve communication expectations amongst the team. The CoP meets quarterly to discuss evaluation findings and make recommendations on process improvement. The agenda items follow the same process as the sub-teams to communicate issues that require feedback, action, or information sharing.

It is beneficial to discuss preferred methods of communication and the role of stakeholders. Table 3.1 illustrates how the CoP decided the best way to engage with stakeholders and how often. Another important consideration is accessibility. The university may have access to different tools and resources, i.e., Zoom, while the industry partners utilize Skype. It is essential to consider all information technology security practices before deciding on a preferred method of communication. An additional factor to account for is the importance of connecting with the community of practice monthly. This style strengthens communication efforts and builds a sense of team.

Table 3.1.

Best Way to Communicate with the Community of Practice

Who	Best way to engage	Other consideration	Role	Frequency of communication
University	Microsoft Teams and email	An initial visit to industry headquarters	Researcher recommends and drafts curriculum, evaluations, and reports	Bi-weekly with industry and Fellows
Industry	Skype, Microsoft Teams, and email	Schedule campus visits, discuss information technology security practices, and potential barriers	Contribute insight on draft curriculum, evaluations, and reports	CoP meets quarterly, CoP sub-teams meet monthly, CoP sub-team leads bi-weekly
Fellows	Email and Group Me application	Student class schedules may conflict with planned activities	Provide feedback	Bi-weekly with University lead and monthly with Industry

Sampling Procedures

The IFP started the recruitment process at a large midwestern university in the spring semester of the student's sophomore year and created a recruitment plan to attract female and underrepresented racial/ethnic students. Multicultural student organizations, college career coaches, program directors, department heads, and faculty received information about the program and were encouraged to share the opportunity within their network. The department's social media accounts featured details on how to apply and included the hashtag of multicultural student organizations to promote broad outreach. The university lead screened all the applicants and identified the top 40 applicants based on predetermined criteria. Eligibility requirements include a 2.75-grade point average, major in degrees from the Colleges of Agriculture, Engineering, or Business, and good standing with the institution. The CoP interviewed applicants and selected their top candidates.

Participants in this pilot IFP comprise the subjects of a single-group post-test only design. Nineteen Fellows participate in the study through a non-random sampling technique leveraging convenience sampling. The Fellows are selected to participate during their junior year and receive two $500 scholarships, one for each semester of participation. Participation is contingent upon their willingness to engage in leadership activities with industry partners for the entirety of an academic school year.

Data Collection

Data collection for this study includes online surveys and virtual focus groups that support a multimethod approach. The Qualtrics survey system stores and distributes electronic questionnaires, while the Zoom meeting room records and creates transcripts of the focus groups. All identifying information is deleted and replaced with pseudonyms and participant ID numbers. Kirkpatrick's four-level model and appreciative inquiry guide the procedures. Fellows participate in the IFP created by the CoP using the 70-20-10 framework. Table 3.2 illustrates a timeline of activities.

Table 3.2.

Fellows Participate in an Activity and Data Collection Follow

Activity	5th mo	6th mo	7th mo	8th mo	9th mo	10th mo	11th mo	12th mo	13th mo	14th mo	15th mo	16th mo
1-Site Visit	X											
2- Coaching sessions					X	X	X	X	X	X	X	X
3- Leadership lecture series part one: Leadership Expectations				X								
4- Leadership lecture series part two: Accelerate your interview talents					X							
5- Leadership lecture series part three: inclusion and diversity						X						
6-Site visit							X					
7- Service learning pretest survey							X					
8- Service learning experience							X					
9- Case study							X					
10- Coaching mid-year check-in survey								X				
11- Leadership lecture series part four: Emotional intelligence									X			
12- Service learning experience									X			
13- Site visit											X	
14- Case Study												X

15- Service learning post-test survey			X	
16-Coaching end of year check-in survey			X	
17- Overall Program Review (Focus Group)			X	

Fellows participate in two case studies. After each case study, they receive a survey to assess their reaction, learning, and behavior changes. The purpose is to determine their satisfaction and acquisition of new information. Fellows participate in three site visits in mid-west locations. After each event, they voluntarily participate in a survey to measure their reaction and learning. The purpose is to assess the satisfaction of their experiences and if they acquired new knowledge. Fellows identify and participate in two service-learning experiences as a team. The scale measures their attitudes and behaviors toward civic engagement (Steinberg et al., 2008). Before participating in the first service-learning experience, they receive the survey to assess their reactions and behaviors, and their responses are anonymous. After the program, Fellows complete the same measurement. The reactions will not pair together since the final survey incorporates multiple assessments (i.e., service-learning and end-of-year coaching survey) to eliminate separate evaluations. The focus is to assess whether the post-test scores differ significantly from the pretest mean score. These activities comprise 70% of the program, which focuses on experiential learning.

Fellows participated in coaching sessions for 20% of their learning, paired with industry leaders. Fellows and coaches meet via teleconference for at least 30 minutes, six-to-eight times during the program. Industry leaders receive training and resources on how to lead coaching discussions. A mid-year and end-of-year evaluation of the coaching sessions occurred using

questions developed by the CoP. They voluntarily complete a questionnaire to assess their

reaction, learning, and behavior changes. The purpose is to determine their satisfaction, acquire

new information, and behavior changes.

Fellows participate in four leadership lectures facilitated by the CoP, which account for

10% of activities. The following training topics illustrated in Figure 3.7 occur: Leadership

Expectations, Accelerate your Interview Talents, Inclusion and Diversity, and Emotional

Intelligence. After each series, Fellows freely participate in a survey to measure their reaction,

learning, and behavior changes. The purpose is to assess their satisfaction and whether they

acquired new knowledge and changes in behaviors.

Figure 3.6.

Leadership Lecture Series Comprises Four Training Activities

As a Fellow, an interview for an internship with industry partners is guaranteed.

Placements occur the summer after they complete their junior year. The results measure how

many Fellows received offers to intern and how many accepted the internship. After the Fellow's

placement, offers of full-time employment opportunities transpire. They have a chance to accept

or decline full-time jobs. The results measure the conversion from Fellow to an employee with industry partners and other companies.

The next element of the data collection is conducting a focus group after the IFP. A focus group provides descriptive synopses of patterns and themes experienced and may have up to a dozen participants (Rossi et al., 2004). Krueger and Casey (2015) recommend that focus groups capture information about pilot programs. There are three focus groups to accommodate the Fellows' schedules. The questions are focused and progress through Kirkpatrick's four-level; however, the framing uses appreciative inquiry language.

The last data collection element address the sub-question: what are the lessons learned from engaging a CoP. A review of field notes and other program documentation support the process and include a coding process to identify emerging themes. This process supports a cross-data source analysis by comparing and contrasting information from surveys, field notes, and other program documentation, such as monthly agendas. As established, the researcher in this study served as the university program lead for the IFP within the CoP.

The university program lead serves as the creator of the evaluation process and seeks input from the CoP before implementation. The university program lead designs the Qualtrics survey system's questions and distributes the online questionnaire to the Fellows after participation in each activity. Additionally, the leader creates the focus group questions and facilitates the discussion. The university program lead shares the results with the CoP, and each sub-team makes an ongoing continuous improvement to content and delivery. Finally, the CoP participates in a comprehensive data review and makes further changes to improve the IFP to meet the intended outcomes better.

Analysis Approach

After each activity, the university program lead compiles the results and prepares a report for the CoP to discuss. The CoP reflects on the feedback and practices continuous improvement with content and delivery if needed. After the program, the university lead prepares a comprehensive final report of all activities, including supporting data from surveys and the focus group.

Illustrated in Appendix D are examples of the online survey Fellows receive after each activity's participation. The instructions state participation is voluntary, and only completed responses are included in reports. The CoP reviews all feedback using descriptive statistics, which describe the overall average in reactions and patterns and allow future improvements to events as the IFP evolves. The analysis of open-ended questions occurs in the Qualtrics survey system via the data and analysis tab. The researcher reviews the responses and begins a coding process to identify emerging themes in the system before reporting to the CoP. According to Kapp and Anderson (2018), one strength of this approach is that it provides the CoP with the ability to explore the impact of the IFP in real-time. Furthermore, this design informs the CoP if changes occurred (Kapp & Anderson, 2018). For instance, a single group post-test design may illustrate key learning moments, as self-reported by the Fellows, after participating in a case study.

According to Kirkpatrick's four-level model, each evaluation question establishes each goal indicator, as shown in Appendix E. For example, the percentage of satisfaction and knowledge acquired are the indicators for each case study. At the end of the event, the benchmark establishes a reflection of four out of five Fellows' positive levels of satisfaction and new knowledge acquired. At the end of the program, the results of internships and full-time

positions offered and accepted occurs. The CoP further explores the benchmarks based on how many participants respond to the surveys and adjust accordingly.

The other component of the evaluation approach is asking the Fellows questions about the program and their experiences. After the program, Fellows are invited to participate in a focus group to evaluate their experiences and reaction, learning, and behavior changes. There is an opportunity to participate in one of three 60-minute sessions. Open-ended questions, using appreciative inquiry practices, guide the discussion. The purpose is to gain insight if Fellows have strengthened their leadership capacity through learning and behavior changes.

Responses are audio-recorded and then transcribed in a word-processing program. A creation of codes occurs after a thorough review of the answers. A list of tentative codes emerges after the initial examination. Next, possible codes and explanations of each create a codebook. The coding method uses descriptive codes, which identify individual words or phrases to summarize a described experience (Mertens & Wilson, 2019; Saladaña, 2016). Credibility in the focus groups is measured using member checks. That process provides an opportunity to gather data and then share it with participants (Johnson & Christensen, 2017; Saldaña, 2016). For example, during the focus groups, the facilitator shares a verbal summary of key findings and verifies the information (Krueger & Casey, 2015). This approach informs the researcher if rich explanations of the data exist to make sense of what the Fellows learned and indicate if the IFP is useful, also known as transferability (Johnson & Christensen, 2017). Fellows have a chance to listen to others' experiences, learn from them, strengthen their leadership capacity, and indicate the program design's effectiveness.

Using these multiple forms of evaluation sheds light on Fellows' experiences and growth. For instance, the program evaluates if they acquired new knowledge after participating in the

leadership development pilot activity. This multitier approach is vital to deepen understanding of how leadership development interventions impact workforce preparedness. A program developed and evaluated through community engagement to measure the reaction, learning, behaviors, and results holistically could lead to a roadmap of attracting and retaining skilled leaders in a competitive market.

Ethical Consideration

This study engaged human subjects; therefore, the researcher completed the Collaborative Institutional Training Initiative (CITI program). The researcher finished the mandatory training: Responsible Conduct of Research and IRB core modules. The researcher submitted an IRB proposal to the university research compliance office, and proposal 9869.1, as shown in Appendix C, was approved.

Each participant in the IFP received a $1,000 scholarship. However, their participation in data collection was voluntary. The Fellows provided feedback with the understanding that their input impacted the design and delivery of the IFP. The participants received an informed consent form before completing each online survey. The survey responses are anonymously collected, and the results are presented in ways that do not disclose any respondent's identity. Before beginning the focus groups, participants received an online informed consent form. They had the opportunity to read in the document that they do not have to answer any questions they feel uncomfortable answering and may leave the discussion at any time. Participant information from the online focus group is anonymous using participant identification numbers and pseudonyms so that future research will not have information that would lead to identification of individual participants.

Limitations

This study has limitations related to the single group design, internal validity, and data collection impacts. Two limitations of a single group design are the lack of random assignment and a control group. Random assignment happens when participants have dispersed arbitrarily to different groups, and a control group is participants who do not receive the intervention (Mertens & Wilson, 2019). Randomization reduces biased samples, and a control group compares those who received experiences and those who did not (Johnson & Christensen, 2017). However, there are three reasons not to explore this approach. First, it is cost preventative to identify a control group to participate in the evaluation for a year when they do not experience any leadership development intervention applicable to the assessment. There are no resources available at the university to manage another program. Secondly, the program focuses on improving the quality of leadership capacity with participants; therefore, it is crucial to design clear and concise outcomes related to the activities, and a control group will not have access to the program content or delivery. Third, the researcher does not intend to generalize the effectiveness of the IFP since the study is not focused on asking whether the impact applies to other populations.

According to Kapp and Anderson (2018), internal validity threats should be identified and addressed when developing an evaluation plan. For this study, there are two concerns of internal validity: history and maturation. According to Johnson and Christensen (2017), history is an unplanned activity that occurs between the implementation of treatment and post-test, and maturation is a change that impacts future performance. For example, the Fellows may participate in other leadership activities throughout the program or complete a survey during a stressful period, both of which may influence their responses. To minimize the threats of internal

validity, Fellows have multiple opportunities throughout the academic year to provide feedback that demonstrates the effectiveness of the IFP and to participate in a focus group at the end.

There are three additional limitations worth noting in this study: sample size, survey fatigue, and impact of a global pandemic during data collection. First, the sample size is all 19 Fellows participating in the IFP, and they receive a survey after engaging in each program activity. Additionally, all 19 Fellows receive an invitation to participate in a focus group at the end of the IFP. To better understand Fellows' perspectives, Krueger and Casey (2000) recommended 6-9 participants for focus groups. For this study, the sample size reflects access to the participants in the program. The level of participation and the amount of information collected assured saturation of the data. Second, the CoP desired to learn more about participants' experiences to incorporate their feedback into future program improvements. After each program activity, the Fellows received a survey and encouraged to share their insight. For this study, the questions remained consistent from each survey, and similar questions appeared in the evaluation. While consistency benefits the assessment and may add value for some participants, it could also elicit survey fatigue. Lastly, the data collection process, including the surveys and focus group between February 2020 and May 2020, occurred at the onset of a global pandemic: Covid-19. During this period, the university transitioned from in-person activities to virtual learning. The participants received a modified program agenda and balanced uncertainty with their academic and professional work changes. Therefore, given the circumstances, it is expected that there would be decreased participation in program activities, surveys, and focus groups during that timeframe.

Summary

The chapter began by revisiting the purpose of the study and the research questions. It further explored the methodology used to make progress on the research question. A description of the study design, sampling procedures, data collection, analysis approach, ethical consideration, and limitations demonstrated the interplay between engaged scholarship through a community of practice to co-create and co-evaluate a leadership development program designed to create a talent pipeline.

Chapter 4 - Findings

Introduction

This study aims to understand how evaluation is utilized within a community of practice to develop a talent pipeline. This study explores how evaluation data inform a community of practice and lessons learned from engaging a CoP by 1) understanding the Fellows reactions to program activities, 2) discovering the learning acquired after completion of program activities, 3) determining how the Fellows apply key learnings in their interaction with others, 4) observing the results through the offers of full-time employment, and 5) the lessons learned from engaging a CoP in creating and evaluating a leadership development program. Surveys using Kirkpatrick's four-level model captured data after each activity. A focus group practicing appreciative inquiry collected responses after the completion of the program. A review of field notes throughout the entire program served as an additional source of analysis.

First is an overview of the program components, followed by the demographics of the Fellows and CoP. Next, an evaluation report presents the results from the data analysis organized around the research questions. A discussion of each question represents further analysis. This chapter concludes with a summary of the findings.

Overview

The IFP engages Fellows in a yearlong leadership development program. The IFP provides Fellows the preparation to start their careers with a competitive edge by providing them an opportunity to network with industry leaders and learn new skills to lead further. The industry leaders fund the program, and they work closely with the university partner to co-develop and co-evaluate the experience.

The study participants are Fellows selected into the program through non-random sampling techniques leveraging convenience sampling and comprising a single-group post-test only design. The recruitment process started in February 2019, and strategies to attract a broad applicant pool included college/department notifications, faculty/staff referrals, and university newsletters. The Fellows must major in academic programs from the Colleges of Agriculture, Engineering, and Business, maintain a 2.75-grade point average, and good standing at the university. Fellows interviewed for the program in April 2019 by university and industry partners. As shown in Figure 4.1, over 80 students applied, 77 met the minimum requirements for the position, 35 interviewed, and 19 accepted the program's offer.

Figure 4.1.

Recruitment and Selection into the Industry Fellowship Program
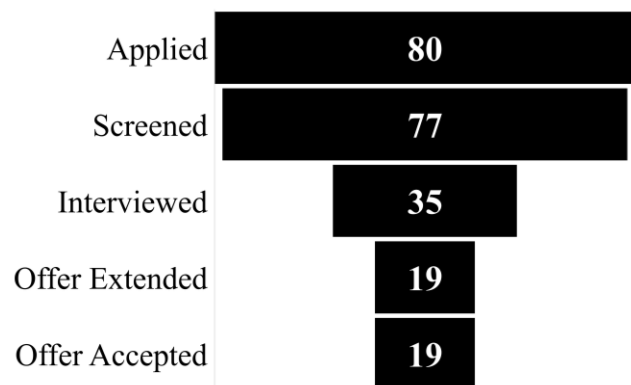
The Fellows participated in the program between May 2019 and May 2020. At the beginning of the second semester, January 2020, two students decided to leave the program mid-year due to a study abroad opportunity and competing time commitment. It is also important to note that in March 2020, the university restricted in-person gathering in response to a global pandemic. The activities planned between March 2020 and May 2020 transitioned to virtual engagements. After each exercise, Fellows received an online survey and a reminder to complete

the questionnaire one week later. All nineteen Fellows received an invitation to contribute to the focus group, and one of the students who left the program mid-year participated.

Demographics

As shown in Figure 4.2, the IFP program consisted of 14 females, representing 74% of the cohort and 26% or five male participants. Figure 4.3 illustrates that 22% or four students represented racial/ethnic underrepresentation, two Hispanic/Latin, and two Asian, while 78% or 15 students identified as White/Caucasian. Nine students represented Colleges of Agriculture, six from Engineering, and four in Business majors, and collectively averaged a 3.6-grade point average.

Figure 4.2.

Seventy-Four Percent of the Cohort Identified as Female

COHORT GENDER DEMOGRAPHICS
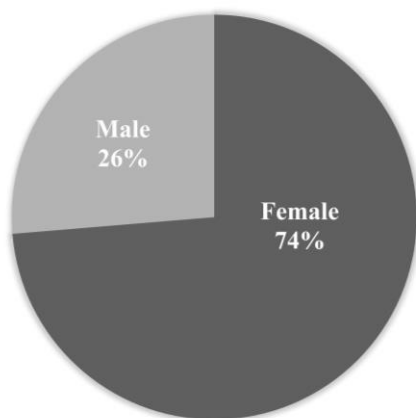
Figure 4.3.

Twenty-Two Percent of the Cohort Identified as Race/Ethnic Underrepresentation

COHORT
RACE/ETHNIC DEMOGRAPHICS

Underrepresented
22%

White/Caucasian
78%
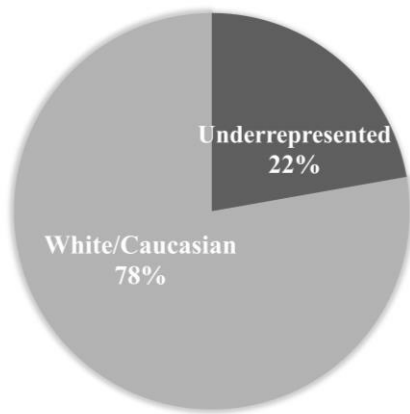
The CoP makeup consists of employees throughout the industry, i.e., department leads in various parts of the organization and representation of human resource activities. As a reminder, there are 12 members of the CoP from university and industry partners. As shown in Figure 4.4, there are five females team members or 42% representation. There is less gender representation on the CoP as compared to the cohort.

Figure 4.4.

Forty-Two Percent of the Community of Practice Identified as Female

COMMUNITY OF PRACTICE
GENDER DEMOGRAPHICS

Female
42%

Male
58%
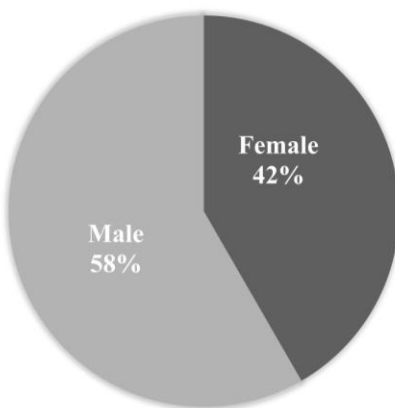
Figure 4.5 presents the racial and ethnic makeup of the CoP. Three out of 12 members identify as underrepresented (two African American/Black and one Hispanic/Latin); therefore, 25% identified as diverse. There is a slight increase in the racial/ethnic diversity on the CoP as compared to the cohort.

Figure 4.5.

Twenty-Five Percent of the Community of Practice Identified as Race/Ethnic Underrepresentation

Findings by Research Question

This section includes the findings for each research question from the data collected in Chapter III. For example, the results report the survey question(s) and focus group responses related to each stage's sub-question. To support the data collection process for sub-question: What type of evaluation data can inform a community of practice, Kirkpatrick's four-level model and appreciative inquiry served as evaluative tools. After each program activity, Fellows completed a voluntary survey with quantitative and qualitative questions. Additionally, Fellows engaged in a focus group at the end of the program. For example, data collected assess the reactions that occur after each program activity via survey and afterward during a focus group. The data analysis approach includes a coding process to identify emerging themes and

descriptive data summarizing information. After the program concluded, Fellows voluntarily participated in a focus group. The data analysis approach includes a coding process to identify emerging themes. A review of field notes and other program documentation supports the data analysis process for further lessons to aid the data collection method. This activity supports a cross-data source analysis by comparing and contrasting information from surveys, field notes, and other program documentation, such as monthly agendas.

Research Question

Research Question: How is evaluation utilized within a community of practice to develop a talent pipeline?

The researcher explored the sub-questions of how evaluation data inform a community of practice and lessons learned by 1) understanding the Fellows' reactions to programming activities, 2) discovering the learning acquired after completion of program activities, 3) determining how the Fellows apply key learnings in their interaction with others, 4) observing the results through the offers of full-time employment, and 5) identifying the lessons learned from engaging a CoP in creating and evaluating a leadership development program.

The following section addresses the evaluation data that informed the community of practice. Members of the CoP wanted to know various information about the IFP and experiences of the Fellows. For instance, the industry focused on reactions and results, while the academic partner concentrated on learning and behavior changes. An exploration of the leading research question: how is evaluation utilized within a community of practice to develop a talent pipeline, occurs after a thorough analysis of each sub-question, beginning with what type of evaluation data can inform a community of practice.

Sub-Question: Reactions

Research Sub-Question: What were the participants' reactions to program activities?

The CoP expressed interest in learning about the Fellows' reactions after each activity and used this information to inform future programming events. There are three questions, illustrated in Figure 4.7, to aid in data collection regarding Fellows' reaction to the program. First, Fellows received an online survey asking if the activity met their expectations. Second, in the assessment, Fellows responded to an open-ended question on improving the activity. Third, Fellows who participated at the end-of-year focus group reflected on a memorable experience. The focus group question supported the reaction stage in Kirkpatrick's four-level model and appreciative inquiry, specifically the discover stage. The following section displays the results of each query.

Figure 4.6.

Data Collected for Results Sub-Question
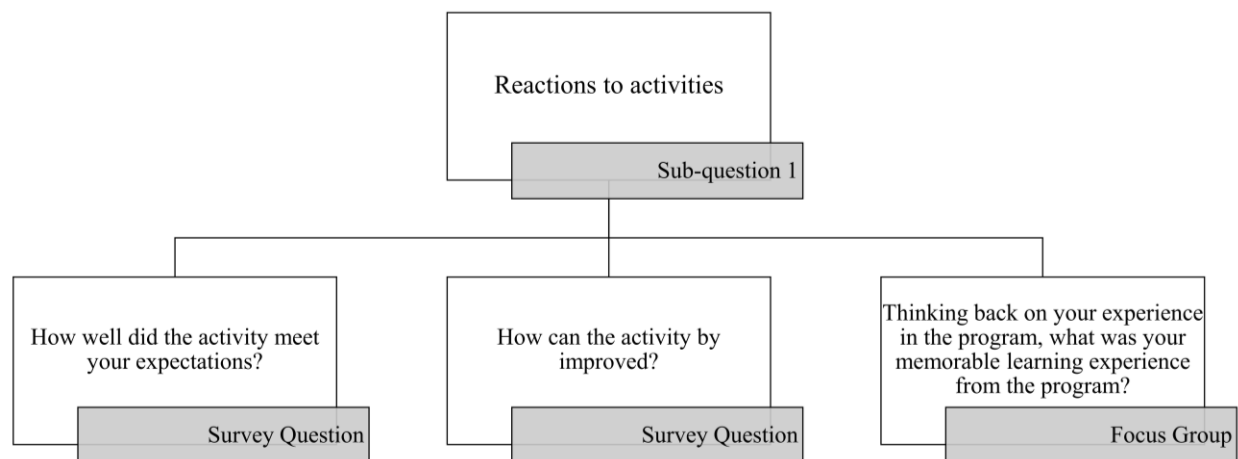
The Fellows participated in eight activities and received an online survey asking them for their feedback. Fellows responded to the question, "How well did the activity meet your expectations?" The responses reflect a 5-point scale from extremely satisfied to extremely dissatisfied. As shown in Figure 4.7, six of the eight activities met the performance benchmark of

80% of responses reflecting a positive satisfaction level. The response rate for each survey varied between 78%, 63%, 84%, 47%, 47%, 36%, 53%, and 71%, respectively. It is worth noting that participants received four evaluations (mid-year coaching, second site visit, service learning, and case study surveys within 30 calendar days) and reminders to share their feedback, impacting survey response rates. Additionally, the program activities coincided with the end of semester expectations, where students receive an increase in assignments, projects, and exams.

Figure 4.7.

Six of the Eight Activities Met the Reactions Performance Benchmark
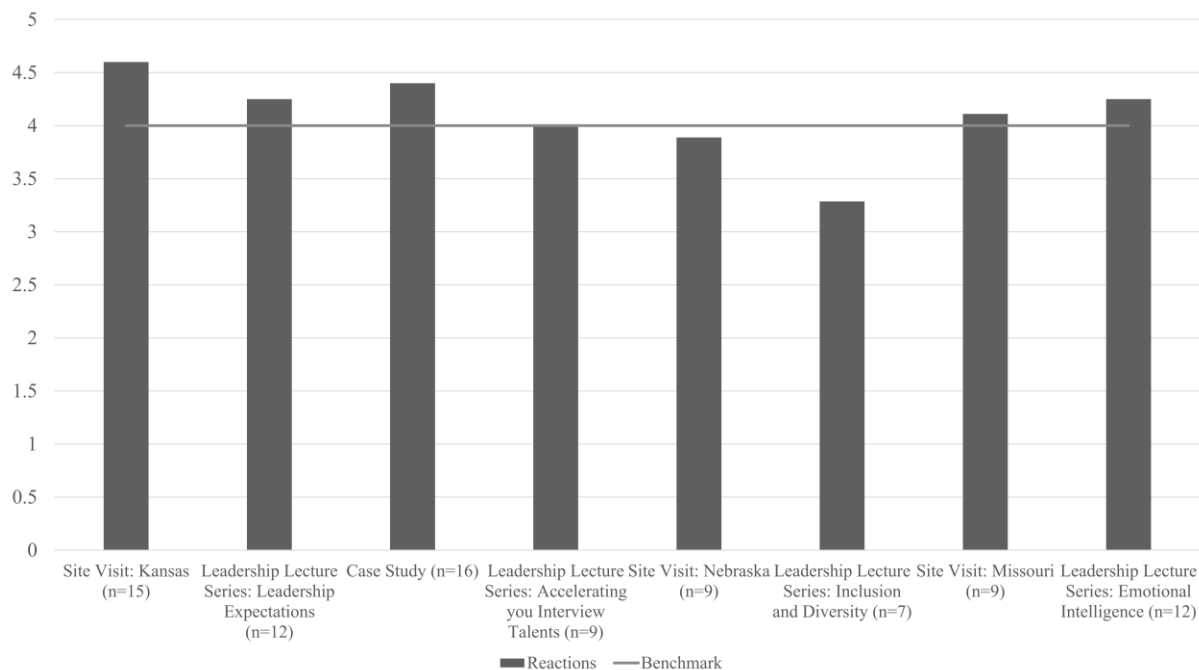
After each activity, Fellows received a survey inquiring how the IFP can incorporate improvements. Table 4.1 represents survey feedback on activities as they occurred chronologically, including three site visits, four leadership lecture series, one case study, and two coaching feedback opportunities. Based on the activities, eight different themes emerged: business functions, scheduling the event, time, feedback, interaction, structure, prework, and

coach selection. An exploration of each activity occurs beginning with all site visits, then the leadership lecture series, case study, and ending with the coaching program.

Table 4.1.

Themes on How Activities Can Be Improved

Activity	Theme	Quote
Site Visit: Kansas	Business Functions	"I would've liked to see more of the corporate office that we were in during the first part of the day because I would really like to work in a primarily office setting so that's what interests me. Sometimes lecture type things can get really boring, but I thought the morning actually went by fairly quickly and it was interesting! Overall, it was a really well put together day and I appreciate all the time and effort the employees put into this program. Thank you!"
Leadership Lecture Series: Leadership Expectations	Scheduling of the Event	"I know it can be very difficult, but scheduling within a window that everyone can be in attendance"
Case Study	Time	"More time to discuss the case studies before presenting our thoughts on it."
Leadership Lecture Series: Accelerating your Interview Talents	Feedback	"The Interview Prep session could be improved by providing a recruiter's perspective and the opportunity to have a transparent conversation about what they look for."
Site Visit: Nebraska	Business Functions	"I really felt this was a well-organized and valuable site visit. With this being said, an office tour to review what functions are present in the office would have been a valuable addition."
Leadership Lecture Series: Inclusion and Diversity	Interaction	"More hands on activity"
Coaching Mid-Year Check-in	Structure	"I think having a more structured meeting schedule would be helpful. I found that both my coach and I have very hectic schedules and it was difficult to find times to meet."
Site Visit: Missouri	Interaction	"I think an opportunity for more movement in lieu of several panels back to back would be beneficial. This could possibly be achieved by grouping the fellows in small clusters, and then perhaps rotating groups in a "speed dating" type of fashion so that each group gets to converse with a panelist. Afterwards, the group could converge for a briefer panel session as we experienced."
Leadership Lecture Series: Emotional Intelligence	Prework	"Have us fill out the emotional intelligence quiz beforehand"
Coaching End of Year Check-in	Coach Selection	"I think that having individuals who are truly interested in the program be coaches would be helpful. My coach didn't seem to have the desire to be there, which in turn made me feel like a burden on them. They didn't answer my emails in a timely manner or ignored them altogether, and only actually agreed to meet with me one time. They were nice, but I feel that they were not invested in the program."

Note. Activities occurred in chronological order, as shown in Table 3.2.

The IFP included three site visits: Kansas, Nebraska, and Missouri. First, as shown in Appendix F, the Fellows attended the site visit in Kansas and wanted to tour the headquarters in that location. The Fellows visited the innovation center and a plant facility; however, the Fellows participated in panelist discussions at the headquarters office; they did not tour the building. The Fellows responded to the survey by suggesting a tour of the headquarters office as beneficial. Second, Appendix G depicts Nebraska's site visit, which involved an overnight trip, and the Fellows engaged in community building amongst their peers. During the site visit, they were assigned to industry employees and participated in job shadowing; however, Fellows desired an overview of the business functions occurring in the location. Third, increased interaction continued as a theme during the last site visit in Missouri. As shown in Appendix H, the schedule

consisted of several panelist activities in a row. Overall, during site visits, the Fellows were curious about the offices' work and more physical interactions with the industry partners.

The IFP included four pieces of training which comprised the leadership lecture series. Except for service-learning experiences, all program activities occurred Monday-Friday between 7:00 a.m. and 6:00 p.m. After completing the Leadership Expectations session, Fellows expressed they did not want to miss class routinely. The university partner facilitated the Leadership Lecture Series: Accelerate your Interview Talent based on feedback from the industry partner to include practice questions and incorporating the STAR (Situation, Task, Action, Results) interview technique. The Fellows shared they would benefit from an industry perspective. Fellows participated in a Leadership Lecture Series: Inclusion and Diversity, which included all members of the CoP and a facilitator from an office in South America. The session was two-hours long, including video, partner reflection, and group discussion regarding the industry culture. However, the Fellows requested more hands-on activity to improve the experience. The university partner facilitated the final Leadership Lecture Series: Emotional Intelligence. The session introduced Fellows to the topic and incorporated various hands-on activities. The Fellows shared feedback that some activities could occur via prework to save classroom instruction to apply what they learned. Overall, during the leadership lecture series, the Fellows discussed scheduling events, requesting feedback from the industry partner on their interview, increased interaction, and prework assignment.

The CoP designed two case studies: Navigating Consumer Trends and Reasonable Accommodations. The Fellows received the case studies in advance and pre-work with questions for their consideration. During the in-person classroom activity, they engaged in a 20- minute group discussion regarding their pre-assigned case. Afterward, the Fellows presented their

recommendations and then participated in a 10-minute conversation with their peers and industry partner. While the Fellows desired additional time, the industry partners were pleased with their engagement and the types of questions asked.

The coaching program assessment occurred at mid-year and end-of-year. The Fellows received a coaching guide at the beginning of the semester. The coaching guide provided them with coaching resources, such as questions to ask their coach by topics; however, it did not provide them with specific monthly topics. During the mid-year check-in, Fellows expressed additional guidance on structuring their 1:1 meetings with their coach. During the end-of-year assessment, coaching selection emerged as a theme. The Fellows suggested the importance of identifying industry coaches and pairing them accordingly. The last information collected was through focus groups.

There were three focus groups scheduled to accommodate the Fellows' class schedules. Ten Fellows participated in virtual focus groups via the Zoom platform. The transition from in-person to virtual focus groups occurred due to COVID-19 restrictions and university practices to limit in-person meetings. The Fellows were asked an appreciative inquiry question from the discovery stage, "Thinking back on your experience in the program. What was your most memorable learning experience from the program." The following themes depicted in Figure 4.8 emerged: learning about self, connection, and culture. The Fellows reported that they learned about themselves through the leadership lecture series on emotional intelligence and site visits by engaging in self-reflection. Then, they shared the importance of connecting with others through the coaching and networking events. Both activities partnered Fellows with industry leaders. The industry partners encouraged and empowered the students to engage with questions about the company, culture, and career paths. Last, the Fellows expressed appreciation for learning more

about the industry culture through leadership lecture series on inclusion and diversity and site visits. The Fellows engaged with industry leaders and were able to interact within a professional setting.

Figure 4.8.

Themes on Memorable Learning Experiences

The CoP reviewed the data collected relevant to Kirkpatrick's four-level model, the reactions stage, after each activity. The CoP recognized Fellows' reactions to program components were overwhelmingly positive and made minor improvements as the activities progressed. The CoP discussed the below-average satisfaction levels for two program activities: Site Visit in Nebraska and Leadership Lecture Series: Inclusion and Diversity. Both activities occurred in the same month. The CoP reviewed the site visit's agenda and made revisions to Missouri's next site visit, which occurred three months later. The CoP adjusted the plan by starting the visit to introduce business functions performed at the site. This approach provided Fellows with the necessary foundation of the services offered at the location. Concerning the Leadership Lecture Series: Inclusion and Diversity, the program was two hours with little physical movement. The participants included Fellows and industry partners and were

encouraged to reflect on how the topic impacts them daily. The following Leadership Lecture Series on Emotional Intelligence occurred two months later and incorporated movement and small group discussion. The data collected from the reaction stage informed the CoP and allowed for continuous improvement in response to the strengths and growth areas throughout the IFP.

Sub-Question: Learning

Research Sub-Question: What learning did participants acquire after completion of program activities?

The CoP expressed interest in learning about the Fellows' learning after each activity and used this information to inform future programming events. There are four questions, illustrated in Figure 4.9, to aid in data collection regarding Fellows' learning in the program. First, Fellows responded to an online open-ended question describing major concepts learned in the activity. Second, Fellows received an online survey asking if they left with a better understanding of the industry. Third, Fellows who participated at the end-of-year focus group reflected on continuing their development. Fourth, during the focus group, the Fellows reflected on how to leverage their learning. The focus group questions supported the learning stage in Kirkpatrick's four-level model and appreciative inquiry, specifically the dream and design stages. The following section displays the findings of each question.

Figure 4.9.

Data Collected for Learning Sub-Question
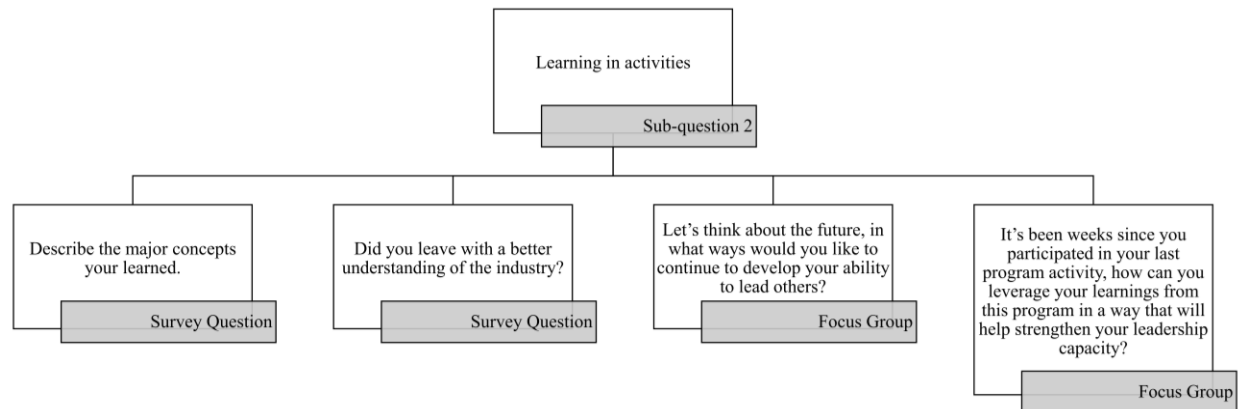
After each leadership lecture series and case study, Fellows received a survey asking

them to describe major concepts learned. In Table 4.2, six different themes emerged: others'

experiences, ethics, navigate complex issues, interview preparation, unconscious bias, and

empathy v. sympathy from five activities. First, the leadership lecture series surrounded the

Fellows with industry experiences as they learned more about the core competencies used to

develop leaders. Others' experience is important because it reflects an industry culture that they

care about their employees and decide to put employees' needs first. Second, the case study

provided the Fellows two experiences to engage in challenging topics, and they shared their

solutions. Afterward, they engaged in conversation with their peers and industry leaders and later

acknowledged that ethics plays a role in decision making. Third, Fellows participated in a

training designed to improve their interviewing skills, and they reflected that they learned how to

apply the STAR technique. This practice is commonly used in the interview process by teaching

interviewees to respond with a situation, task, action, and results. Fourth, the Fellows

participated in the inclusion and diversity session and expressed that they learned about

unconscious bias. Finally, Fellows engaged in emotional intelligence training and explored the

difference between empathy and sympathy. The next learning experience focused on if the

Fellows left the activity with a better understanding of the industry.

Table 4.2.

Themes Describing Major Learning Concepts

Activity	Theme	Quote
Leadership Lecture Series: Leadership Expectations	Others' Experiences	"I felt most excited when the idea of putting people first kept coming up. Most of the examples by the industry leaders showed us demonstrated that the industry genuinely cares about doing the right thing and knowing when you're doing the right thing."
Case Study	Ethics	"Not all company decisions are going to be easy/seem ethical."
	Navigate Complex Issues	"Major concepts that I learned were how to accommodate religious beliefs in the workplace and how to communicate with consumers and producers about new trends that people may not agree with."
Leadership Lecture Series: Accelerating your Interview Talents	Interview Preparation	"Before this session, I did not know what kinds of questions to ask interviewers."
		"Use STAR to answer interview questions"
Leadership Lecture Series: Inclusion and Diversity	Unconscious Bias	"I didn't realize how many people were affected by unconscious bias and the lecture brought that to my attention."
Leadership Lecture Series: Emotional Intelligence	Empathy v. Sympathy	"I learned that we must be aware of others emotions and be aware of how out emotions affect others."

The Fellows participated in three activities and received an online survey asking them for their feedback. Fellows answered the question, "Did you leave with a better understanding of the industry" The replies reflect a yes or no reaction. As shown in Figure 4.10, all three site visits met the performance benchmark of 80% of responses reflecting learning. Survey response rates varied from 88%, 47%, and 53%, respectively.

Figure 4.10.

All Three Site Visits Met the Performance Benchmark
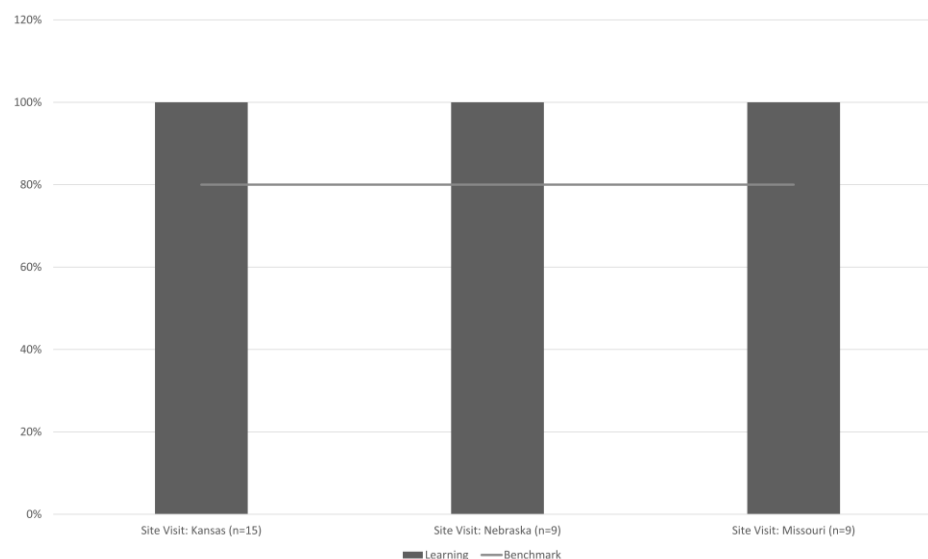
Ten Fellows participated in virtual focus groups. The Fellows were asked an appreciative inquiry question from the dream stage, "Let us think about the future; in what ways would you like to continue to develop your ability to lead others?" The following themes depicted in Figure 4.11 emerged: influence others, take risks, and serve others. One Fellow reported that they want to explore how to become influential in group settings. Another Fellow shared that they want to experiment with taking risks and acknowledged that perfectionism is not the goal. Last, an emerging theme included the Fellows' interest in practicing servant leadership principles by focusing on serving others.

Figure 4.11.

Themes on Developing Abilities in the Dream Stage
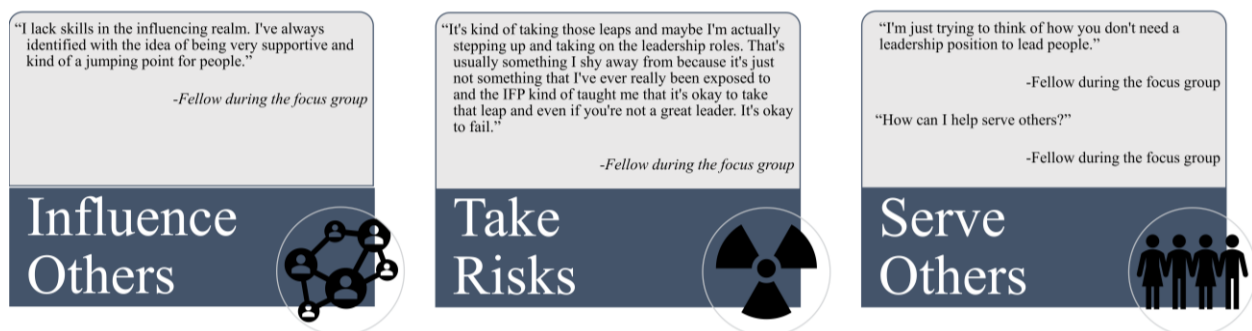
Ten Fellows participated in virtual focus groups. The Fellows were asked an appreciative inquiry question from the design stage, "It has been weeks since you participated in our last program activity; how can you leverage your learnings from this program in a way that will strengthen your leadership capacity?" The following themes depicted in Figure 4.12 emerged: practice self-confidence, communicate effectively and apply experiences. One Fellow reported that they learned how to practice self-confidence by accepting assignments outside of their comfort zone. Another Fellow shared that they can leverage how to communicate with professionals in the workplace. Last, a Fellow expressed applying learning moments to their professional organizations.

Figure 4.12.

Themes on Leveraging Learning Experiences in the Design Stage

"I'm usually someone who kind of keeps to myself, and if it's not something that I think I can do, I just don't really go for it. And so I had the opportunity come up awhile back to apply to be an ambassador for CATS Cupboard. And that was really something that I had not a lot of experience with but said why not. So then in the interview, they asked if I was interested in a leadership position. And I think that was probably the first time I've ever really said yes to that because, you know, being in the program kind of made me want to try to lead a little more than before. Whereas I kind of would rather be a follower, so that's pretty cool."

-Fellow during the focus group

Practice Self-Confidence

"Another really important aspect of this program is like learning how to communicate with those people before we are even in the workforce, learning how to express your ideas and just gaining that confidence in a very lightly controlled environment. Just learn how network. A lot of people in our generation don't really like to talk in front of people and are very likely to send you a Skype message then like go up to talk to you. So I think that's important just to learn how to talk to leaders in our field. Like a face to face conversation rather than virtually."

-Fellow during the focus group

Communicate Effectively

"Specifically with like just transferring like knowledge and leadership with a student organization that I've become involved with for next year. I have a direct role with development of my peers and development of a group as a whole and so it's really just a great opportunity and kind of in the same aspect where how you lead us through a leadership lecture series."

-Fellow during the focus group

Apply Experiences

The CoP reviewed the data collected relevant to Kirkpatrick's four-level model, the learning stage, after each activity. The CoP recognized Fellows' learning of program components and continued engagement. The CoP reflected an appreciation of participating in the Leadership Lecture Series: Inclusion and Diversity with the Fellows and overall was pleased with the interactions. Some CoP members acknowledged the Fellows were quiet at various points of the discussion; they would have preferred more conversation. The CoP discussed the importance of educating the Fellows on the common language utilized with the industry; therefore, they learned about the industry's leadership expectations. The leadership expectations are the organization's terminology based upon core competencies practiced in their workplace. Understanding the common language with an employer provides the Fellows a competitive edge in the recruitment and selection process and introduces them to the company culture. Therefore, the CoP continued to embed their leadership expectations into each activity and was satisfied with those themes emerged in their survey responses. For example, the Fellows were using the common language in their reflections, e.g., doing the right thing. Consequently, each activity focused on components of the industry's core competencies or leadership expectations. The CoP also recognized that the Fellows appreciated the site visits, and they used the feedback to make improvements to the next

site visit schedule. The data collected from the learning stage informed the CoP and allowed them to make decisions on the impact of the IFP.

Sub-Question: Behavior

Research Sub-Question: What changes in behaviors did participants implement?

The CoP expressed interest in learning about the Fellows' behaviors after each activity and used this information to inform future programming events. There are five questions, illustrated in Figure 4.13, to aid in data collection regarding Fellows' behavior in the program. First, Fellows responded to an open-ended question describing responsibility and commitment to address society's issues before and after participating in service-learning activities. Second, in the mid-year check-in survey, Fellows responded to meeting with their coach monthly. Third, in the mid-year check-in survey, Fellows reacted to whether they were active participants in the coaching program. Fourth, at the end of the year check-in, Fellows responded to an online survey if they applied learning moments from the coaching program. Fifth, during the end of the year focus group, Fellows reflected on how they applied key learnings. The focus group question supported the behavior stage in Kirkpatrick's four-level model and appreciative inquiry, specifically the destiny stage. The following section displays the results of each query.

Figure 4.13.

Data Collected for Behavior Sub-Question
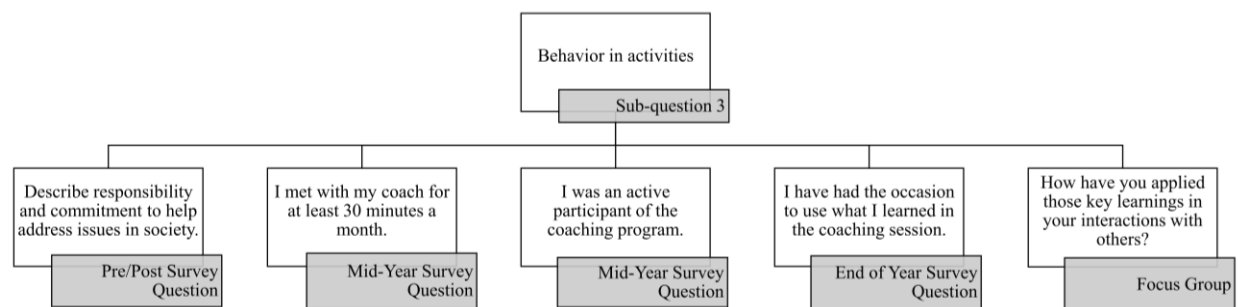
During the IFP, the Fellows participated in two service-learning experiences, one activity per semester. Before participating in the first service-learning activity, Fellows received an online survey and asked, "I have a responsibility and commitment to use the knowledge and skills I have gained as a college student to collaborate with others, who may be different from me, to help address issues in society. Considering your education and experiences as a college student, explain the ways you agree or disagree with this statement, and provide examples when relevant." As shown in Figure F4.14, three themes emerged from the six responses: collaboration, embrace diversity, and practice. The following section explores themes after Fellows participated in both service-learning activities.

Figure 4.14.

Themes on Service-Learning Experiences Before the First Activity

After participating in both service-learning activities, Fellows received an online survey that asked, "I have a responsibility and commitment to use the knowledge and skills I have gained as a college student to collaborate with others, who may be different from me, to help address issues in society. Considering your education and experiences as a college student, explain the ways you agree or disagree with this statement, and provide examples when relevant." As shown in Figure F4.15, diverse perspectives emerged as a theme after completing both service-learning activities. There were three responses to the survey question. Although the

reactions decreased from before and after activities, embracing diversity continued through both events.

Figure 4.15.

Diverse Perspectives Emerged as a Theme After Both Service Learning Activities

The Fellows participated in a coaching program and were assigned an industry coach. The program expectations included 30-minute coaching sessions throughout the program. Fellows received an online survey mid-year to check-in on their progress. Fellows responded to the question, "I met with my coach for at least 30 minutes monthly" and "I was an active participant in the coaching program." The responses reflect a 5-point scale from strongly agree to strongly disagree. Based on 13 responses, as shown in Figure 4.16, both questions met the performance benchmark of 80% of replies reflecting behaviors. The response rate for each survey is 68%.

Figure 4.16.

Both Mid-Year Check-in Questions Met Performance Benchmarks
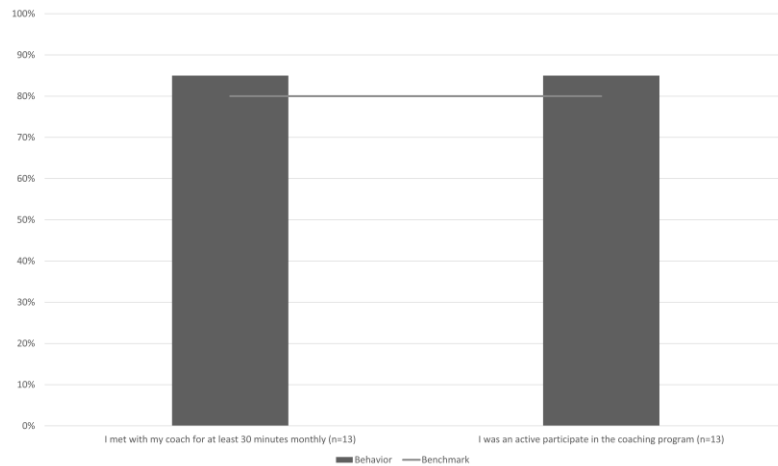
        Fellows received an online survey at the end of the year to check-in on their progress.

Fellows responded to the question, "I have had the occasion to use what I learned in the coaching

session." The responses reflect a 5-point scale from strongly agree to strongly disagree. As

shown in Figure 4.17, and based on three responses, the end-of-year coaching session did not

meet the benchmark. The response rate is 18%.

Figure 4.17.

The End of Year Coaching Session Did Not Meet the Benchmark
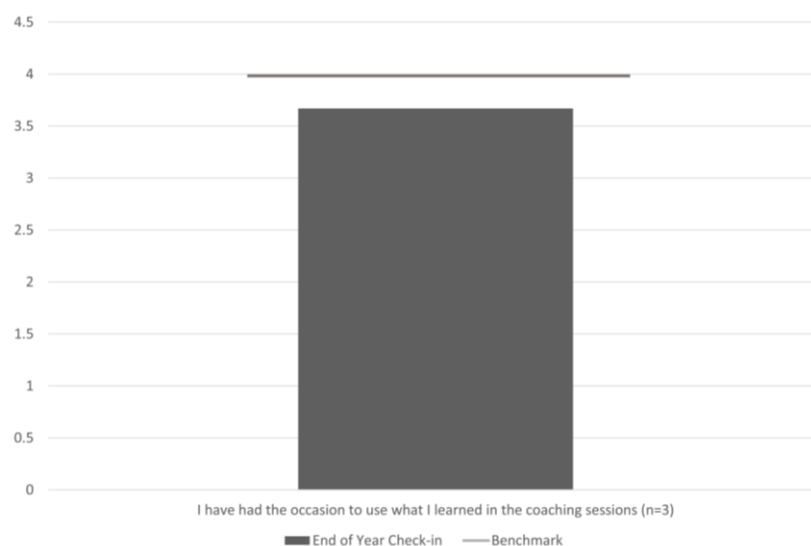
Ten Fellows participated in virtual focus groups. The Fellows were asked an appreciative

inquiry question from the destiny stage, "How have you applied those key learnings in our

interactions with others? The following themes depicted in Figure 4.18 emerged:

communication, self-reflection, and delegate. One Fellow reported that they shifted their

behavior and began to talk more in larger groups, while another shared that they used the STAR

method when communicating with others. They began to describe the situation, perform tasks,

explain the actions, and conclude with the final expectations or results. Other Fellows shared that

they began to self-reflect on concerns, such as not having the perfect career path or explore

which company shares their values. Last, a Fellow expressed applying learning moments to their

workplace and professional organizations.

Figure 4.18.

Themes on Behaviors in the Destiny Stage
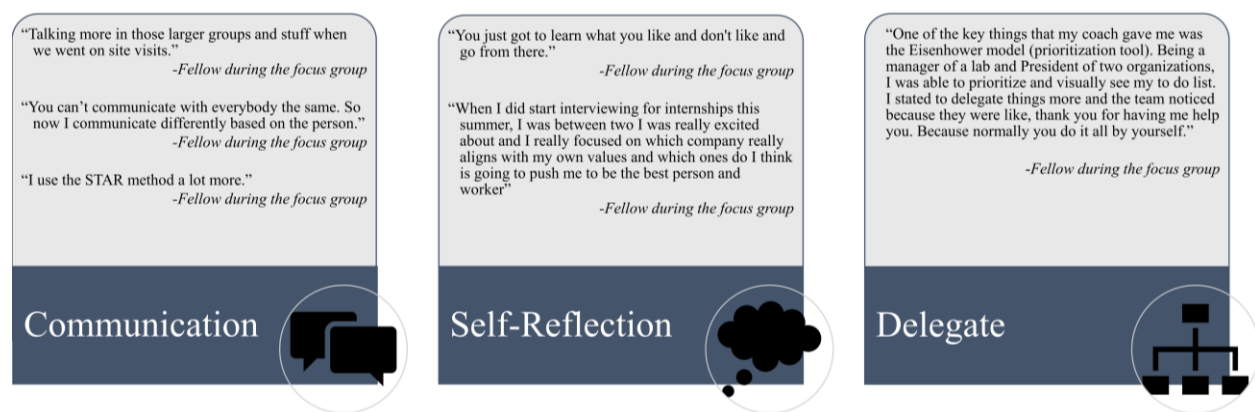
The CoP reviewed the data collected relevant to Kirkpatrick's four-level model, the

behavior stage, throughout the program. The CoP identified service-learning as an essential

experience for the IFP. The Fellows collaborated with a university program and participated in

two volunteer events occurring within the local community. The Fellows took the initiative and

planned an end-of-year service-learning experience, including the CoP. However, a global

pandemic limited in-person gatherings and canceled the event. The other activity focused on

behavior changes is the coaching program. The CoP identified industry coaches to pair with the Fellows. The coaches were early career professionals, university alumni, or professionals in similar fields of interest. The university provided virtual training for the coaches. The CoP was concerned about continuous engagement, therefore, decided to conduct mid-year and annual check-ins. The mid-year feedback reflected that Fellows were routinely meeting with their coach. The data collected from the behavior stage informed the CoP and empowered them to make decisions based on information.

Sub-Question: Results

Research Sub-Question: What are the results of the program relating to full-time offers of employment?

The CoP expressed interest in the results throughout the program and utilized it for future programming and funding. There are two questions, illustrated in Figure 4.19, to aid in data collection regarding the results. Fellows self-reported the offers and acceptance of internships and full-time employment with the industry partner. The next section displays the results of each question.

Figure 4.19.

Data Collected for Results Sub-Question
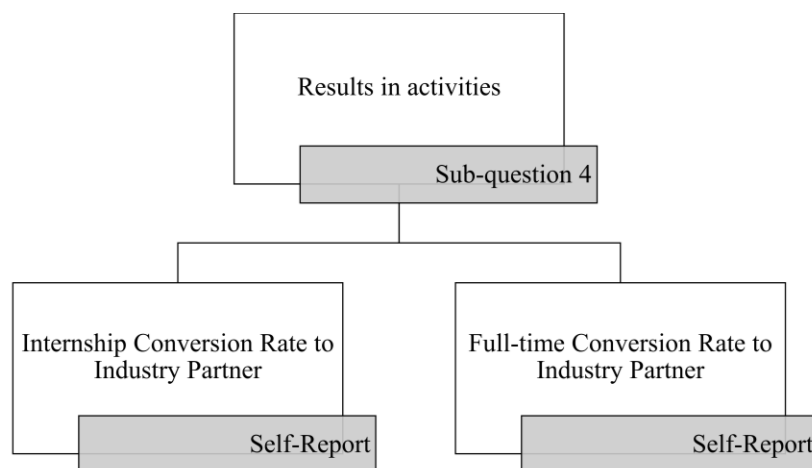
The Fellows interviewed in September 2019 for internships between June 2020 and August 2020. Applicants must qualify for internship positions in which they apply, and as shown in Figure 4.20, only 17 met the threshold. One student could not work following graduation due to a competing contract with another employer. The other student applied for a position in which they did not meet the minimum qualifications. Therefore, 17 Fellows interviewed for internships, and 11 received offers with the industry partner. The conversion rate of Fellows who received internship offers is 65%. Only six Fellows accepted the internship, which translates to a 55% acceptance rate. Of those that took the internship, five majored in Agriculture, one in Engineering, and none in Business. The demographics included five females and two racially/ethnic diverse interns.

Figure 4.20.

Results of Fellow Internship Conversion with Industry Partner
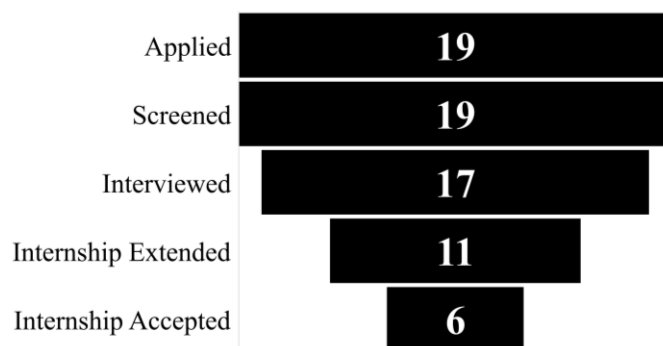
Thirteen Fellows did not conduct summer internships with the industry partner. Instead, 11 Fellows accepted summer internships with other employers from various sectors and disciplines, and two took full-time summer employment opportunities. Those who received different positions, four majored in Agriculture, five in Engineering, and four in Business. The demographics included nine females and two racially/ethnic diverse Fellows.

The CoP discussed the reasons five Fellows declined the internship offers. Two Fellows reported they received competitive offers from other companies, and three conveyed offers for

positions that they did not apply for with the industry partner. One Fellow majoring in

Agriculture reported that the interviewer thought they would better fit in a different role based on

previous experience. In contrast, the other two Fellows in Engineering received offers for a seven

to eight month co-op. The latter did not want to pause their education journey; therefore, they

accepted other companies' positions.

The Fellows completed ten-week virtual internships between June 2020 and August 2020

due to the global pandemic. It was important to the industry partner to continue with internships,

although it would not be in-person experiences. After the internship, hiring managers made

recommendations for full-time positions between August and September 2020. As shown in

Figure 4.21, all six Fellows received full-time offers; hence, the conversion rate is 100%.

However, three Fellows accepted the full-time positions, which translates to a 50% acceptance

rate. Of those who took the full-time jobs, two majored in Agriculture and one in Engineering.

The demographics included three females and one racially/ethnic diverse interns.

Figure 4.21.

Results of Fellow Full-Time Conversion with Industry Partner
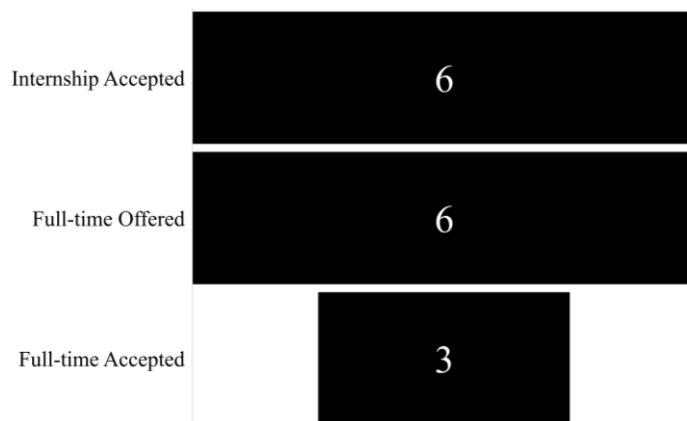
The CoP discussed the reasons three Fellows declined the full-time offers. One Fellow

described the internship helped them realize they were not interested in that type of work, and

instead, desired to pursue a career path not offered by the industry partner. Another Fellow

majoring in Agriculture reported that the hiring manager did not have a current vacant position but recommended the Fellow for hire. The Fellow received an offer later in the semester after the All-University Career Fair; however, they accepted another company position. In contrast, the last Fellow in Agriculture decided to join the Peace Corps. The data collected from the results stage informed the CoP and empowered them to continuous improvements to meet the desired outcomes. A thorough analysis of the next sub-question and the lessons learned from engaging a CoP continues in the next section.

Sub-Question: Lessons Learned

Research Sub-Question: What is the process for creating and implementing a CoP to guide a leadership development program?

A review of field notes and other program documentation supports the data analysis process and includes emerging themes to address the sub-question: what are the lessons learned from engaging a CoP? A cross-data source analysis supports this process by comparing and contrasting information from surveys, field notes, and other program documentation, such as monthly agendas. Based on this information, themes emerged.

Based on this researcher's experience, three lessons are worth exploring when engaging a CoP: culture, diversity, and power. First, the blending of different cultures as they approach the work is a valuable lesson learned. The culture became a pervasive observation in the collaboration. The CoP consists of the majority of university alumni committed to developing the Fellows and establishing networks. While many of the CoP graduated from the university, their prior work experience is in industry. It is common to think that the private sector is agile and quick to adapt, while higher education tends to take a slower pace toward change. This mindset became apparent when the CoP desired real-time feedback on Fellows' experiences. Immediately

following the plant tour at the Wichita site visit in May 2019, a CoP member wanted to know the visit's strengths and growth opportunities. The university lead researched evaluative tools to help gather data to aid in continuous improvement practices. After each activity, the Fellows provided feedback to incorporate changes to program delivery. The sense of urgency to acquire feedback and implement changes was immediate.

Another example of cultural differences made clear by the industry partners is the importance of continuous improvement in program content and delivery. Hence, the program incorporated feedback after each activity from the Fellows to improve future events. The industry expected an agenda for each meeting and requested a schedule at least one week in advance. The university lead created an outline based on the industry partners' input, and it also evolved. For example, the university lead suggested starting each meeting with accomplishments. Simultaneously, a CoP partner recommended beginning each discussion with a safety moment because they begin their department meetings that way. As the nation grappled with social justice issues in 2020, the industry partner further requested that the CoP meetings include an inclusion moment. As shown in Appendix I, the CoP Sample Agenda demonstrates the expectation of starting a session with a safety/inclusion moment, the time allotted for each topic, and who was responsible for leading the discussion. The practice of beginning each CoP meeting with an inclusion/safety moment transitioned to the IFP. The CoP implemented this change within the program and asked Fellows to reflect on an experience consistent with their culture. This practice demonstrated the industry value on both topics (inclusion and safety).

The CoP intertwined leadership expectations into all program components to enhance the understanding of the industry culture. Leadership expectations are the core competencies that guide the industry partners' company behaviors. Therefore, the CoP developed the leadership

lecture series to enhance leadership expectations competencies. It was essential to the CoP that the leadership expectations reinforced the industry's culture; hence it was present in all activities. The industry's culture influenced the interactions within the CoP, design of the IFP, and the Fellows' understanding of the workplace.

Second, as the program progressed, recruiting various talents became more of a priority. It is a competitive process to recruit and select a highly talented, diverse workforce. The industry expressed an interest to attract more females and racially/ethnic diverse employees. The CoP created and evaluated an IFP to develop potential talent for industry positions. The CoP created a recruitment plan to attract students into the program. For example, this plan included outreach to multicultural student organization leaders, specifically sending the opportunity directly to the President, Vice President, Secretary, and Treasurer, requesting they share information about the IFP within their networks. Part of the recruitment plan included hosting information sessions; however, there was low student turnout, although the university lead distributed food and promotional items. The recruitment of racial/ethnic diverse students resulted in 22% of the selected cohort identifying as diverse.

The cohort's demographics are important; however, it is crucial to recognize the collaborators' various backgrounds. The CoP consisted of five females and three racially/ethnic diverse team members. Compared to the cohort, there is less gender representation on the CoP; however, a slight increase (3%) in the racial/ethnic diversity compared to the cohort. The CoP desired to create a welcoming and inclusive environment in the IFP. Due to industry attrition, the CoP discussed broadening the demographic makeup of the CoP to be more diverse and included incorporating broader industry subject-matter-experts into program activities. For example, when involving guest participation for case studies, the industry identified gender and racially/ethnic

employees to engage with the Fellows. Additionally, the CoP recognized the importance of connecting the Fellows with early-career professionals too. By including other industry employees, the Fellows' professional interactions increased.

The CoP recruiting team identified industry coaches for the Fellows. The university lead paired coaches and Fellows based on similar backgrounds (university alumni) and career interests. There were eight female coaches and four racially/ethnic coaches. There were fewer female coaches available to match within the cohort. While the coaches' racially/ethnic diverse makeup mirrors the cohort, it did not necessarily equate to similar career interests. As a result, a gap in the coaching program was a lack of diverse coaches to partner with the Fellows. The issue of diversity appeared throughout discussions with the CoP, which became a priority as part of the culture.

Third, the power dynamics within university and industry collaboration surfaced as the least explicit lessons learned. This study is a blend of disciplines and perspectives—for example, engaged scholarship and a community of practice. An engaged scholarship approach may identify the power to lean towards the academic who is typically seen as the subject matter expert. In contrast, the industry, which is funding this specific program and is most of the CoP, may have the power to lean their way. Regardless, seeking balance is important.

The academic calendar served as a guiding principle for scheduling events throughout the IFP. All program activities occurred throughout the academic year between the fall and spring semesters. There were no activities scheduled during university breaks or over the summer other than the internship opportunities. During the December 2019 programming team meeting, the CoP discussed feedback related to missing class to attend program activities. A member of the CoP responded that the Fellows were aware of the time commitment when they joined the

program. The Fellows received a programming agreement and calendar of events during the first Leadership Lecture Series: Leadership Expectations (fall semester). The programming continued with scheduling at least one event monthly to engage the students, partly because the industry wanted to engage with students as much as possible and develop leadership experiences. The university lead attempted to schedule activities to meet the majority of the Fellows' availability. However, there was a decrease from 18 participants in the first site visit to Wichita in May 2019 to 14 Fellows attending Missouri's site visit in February 2020. One Fellow left the program in February 2020 due to time commitments.

Alternatively, some members of the CoP led departments that financially contributed to the program. The industry operates on a different financial budget than the IFP. For instance, the program began recruitment efforts for Fellows in the spring semester, from January to early February. The industry partners decided how much they would financially award the endeavor approximately three months after Fellows' recruitment. Therefore, the university takes a risk and commits to students before securing a written financial commitment. Varying power dynamics were prevalent during the collaboration.

Three themes, culture, diversity, and power, emerged as lessons learned. While culture was most prevalent, power was least impactful. It was diversity that continued to become more critical and influenced additional changes in the program.

Summary

The IFP utilized evaluation data to inform the CoP- specifically Kirkpatrick's four-level model and appreciative inquiry. The blending of multiple evaluation tools and data provided an opportunity for continuous improvement throughout the Fellows' program content, delivery, and experiences. Data on the practice and experiences of the CoP reflected in field notes, agendas,

and communications inform lessons learned and surfaced themes of culture, diversity, and

power. Leveraging a mixed-methods approach supports acquiring data from various sources,

which provided insight into what happened and why.

Chapter 5 - Conclusion

Introduction

The research aimed to understand how evaluation is utilized within a community of practice to develop a talent pipeline. This chapter starts by revisiting the study's purpose and its relation to the research and its findings. Next is an explanation of learning from a systems perspective regarding IFP outcomes and how community engagements are advanced. Recommendations based on findings and proposed future research opportunities follow.

Purpose

The study focused on a collaboration between the university and industry partners to better understand how to leverage program evaluation to 1) improve IFP outcomes and 2) build a community of practice to advance community engagement. There were three phases: 1) form a community of practice, 2) create a leadership development program, and 3) evaluate the program. The research questions guiding this analysis were 1) How is evaluation utilized within a CoP to develop a talent pipeline, 2) What type of evaluation data can inform a CoP, and 3) What are the lessons learned from engaging a CoP?

Emerged Learnings

This study focused on 19 Fellows in the IFP and examined their experiences using Kirkpatrick's four-level model and appreciative inquiry evaluation tools. The Fellows participated in surveys after each program activity and a focus group at the end of the program. Furthermore, the study assessed lessons learned within the CoP by reviewing field notes and other pertinent documentation. The emerged learnings address systemic change to develop a talent pipeline, IFP outcomes, and advance community engagement through a CoP.

Systemic Change

This study suggests making a meaningful and sustainable change to developing a talent pipeline requires building partnerships with varying viewpoints and acknowledging culture and power's role in exercising leadership. The relationships will take time and commitment from participants. However, the willingness to show up with curiosity and flexibility can make a difference in how people approach and perform the work. In this research, the university and industry partners created a CoP to develop a talent pipeline and leveraged evaluation as an instrument to improve program outcomes.

The collaboration to develop a talent pipeline began through a relational lens and intentionally merged various disciplines to meet the desired outcomes. This approach recognized the blending of different cultures coming together to solve a shared concern. Operating on the perception that the industry has a strong bias for urgency and academia's preference for intentional and evidence-based processes, both partners desired developing emerging leaders with sound practices. The multiple perspectives within the CoP prompted combining expertise and action while influencing emerging leaders' development. The Fellows learned the industry culture and began to immerse themselves in its language. This aspect provides the Fellows with a competitive edge in understanding how to converse within the industry. Additionally, the CoP demonstrated the willingness to learn new skills and embraced various tools to design and deliver the IFP from the project's onset while still embracing continuous improvement.

The results suggest the CoP blended multiple types of evaluations based on data collected to assess process improvement and outcome assessment, which resulted in the application of an improvement/assessment evaluation (Chen, 1996). Furthermore, the CoP merged Kirkpatrick's four-level model and AI to support continuous improvement and assess the outcome after the

program. This approach was practical, met each partner's needs, and invited the CoP to engage further. For instance, the application of Kirkpatrick's four-level model: reactions, learning, behaviors, and results appealed to the CoP for various reasons. The industry partners were keen on learning the Fellows' responses to each activity, so further improvements could occur to content and delivery. They were also interested in the program results, specifically the conversion rate to internships and full-time employment. In contrast, the university partner focused on learning and behavior changes. While Kirkpatrick's four-level model is not for every learning program due to lack of support, resources, and evaluation expertise (Kennedy et al., 2013), it made sense for this CoP, given their desired outcomes around reactions, learning, behaviors, and results.

Notably, the use of evaluation served to balance the power dynamics within the CoP. As previously explored, the CoP practiced various levels of power. The CoP discussed the results of each survey and took action. Then, the CoP implemented changes and surveyed Fellows again. To demonstrate performance expectations in the workplace, the industry partners were keen on demonstrating the importance of continuous improvement. Suggesting an evaluation tool that assessed four learning levels and change as an intervention to address both partners' needs served as a mechanism to balance power.

While the IFP focused on developing a talent pipeline of emerging leaders, experienced leaders also acquired new knowledge and practiced skills. The industry leaders participated in various learning communities. For example, the CoP learned how to navigate purpose and design a leadership development program. The CoP also learned how to broaden their internal networks by engaging diverse perspectives in various activities, such as case studies, panel discussions, and training. Additionally, the industry leaders received training on how to coach talent. Hence,

this experience unintentionally impacted a shift in workforce development for experienced

leaders. By collaborating with industry and university, the IFP influenced workforce

development broader than its initial goal of focusing solely on students. Figure 5.1 demonstrates

that all these components develop and strengthen a talent pipeline equipped to lead a modern

workforce.

Figure 5.1.

Blending Multiple Perspectives to Build a Talent Pipeline
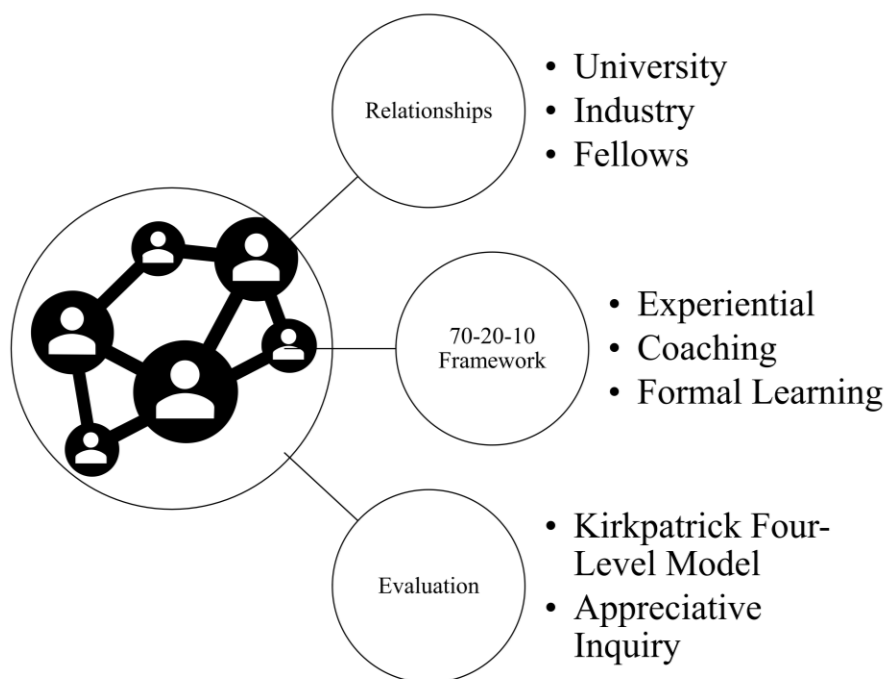
This study suggests that there are benefits to building bridges between the university and

industry partners committed to solving a broader and complex issue impacting the common

good. It is also useful when a shared purpose is related to the university and industry mission and

core values. This common goal aids the initial connection to forging a relationship; however, it

also serves as the conduit to sustaining the partnership. In this case, the collaboration between

university and industry demonstrates a willingness to exercise leadership by acquiring multiple

perspectives with distinct cultures while on the cusp of an emerging trend to build a talent pipeline proactively.

The IFP emerged to address a gap in workforce development, resulting in a strategic initiative to develop a talent pipeline. Bringing industry and university partners together is a forward-thinking practice, and the development of talent pipelines may lead to a better prepared and diversified workforce. While each partner brings a unique perspective, all share a commitment to developing others. Hence, forming a CoP is imperative for a project at this level. In this case, as depicted in Figure 5.2, the CoP designed experiential, social, and formal learning to engage the Fellows in leadership development.

Figure 5.2.

CoP Designed a Program Using the 70-20-10 Framework
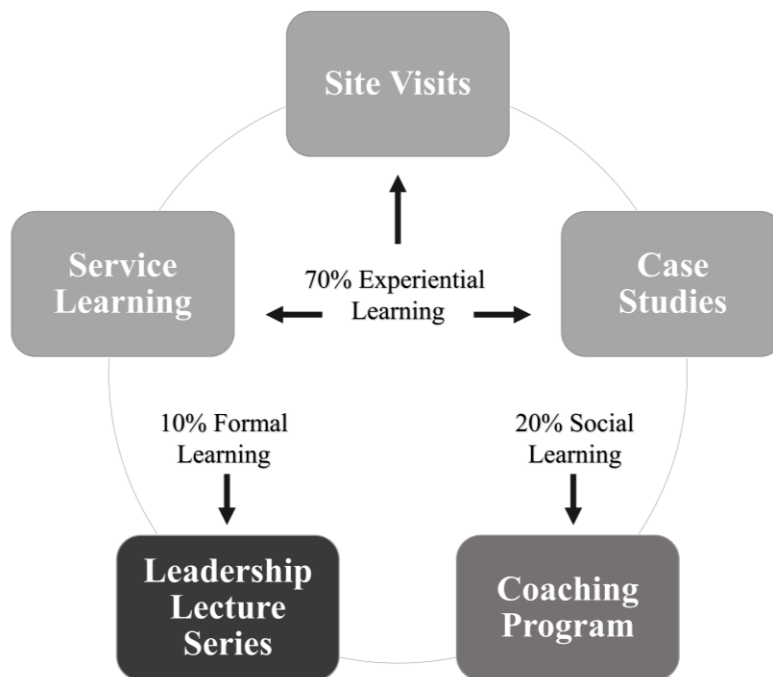
The CoP asked for feedback from the Fellows throughout the IFP. Furthermore, Figure 5.3 demonstrates the CoP established a culture of continuous improvement, commitment to

engaging a diverse community, and effectively balanced the power dynamics. Overall, the IFP can influence emerging leaders to make a broader impact on the industry.

Figure 5.3.

Culture, Diversity, and Power Established Within the CoP

Culture

Community of Practice

Diversity

Power
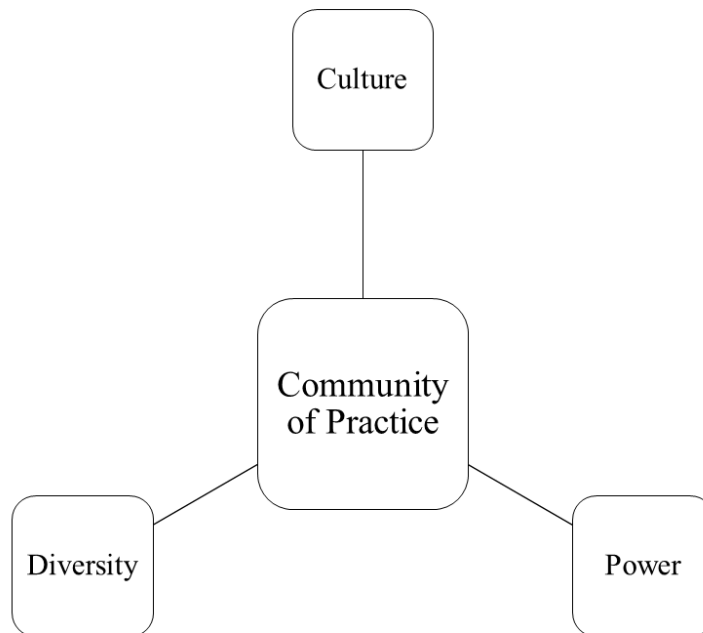
IFP Outcomes

In this study, Fellows provided feedback based on the stages of Kirkpatrick's four-level model: reaction, learning, behavior, and results. There are several key learnings explored based on each level. The reactions stage indicated a strong desire to interact with the industry partners during lectures and presentations physically. Therefore, it is crucial to build interaction into all program activities. It is also an opportunity to model interactive activities during monthly CoP planning meetings. During the learning stage, Fellows indicated they enjoyed their new learning environment with multiple disciplines present that they likely would not otherwise encounter, further suggesting that creating a learning community with cross-functional teams is beneficial. The Fellows self-reported changes in their behaviors as a result of participating in the IFP. The

Fellows recognized the importance of engaging with diverse perspectives to influence change, and creating the space for them to explore this practice adds value to the IFP. The final stage of Kirkpatrick's four-level model is the results. It is essential to understand the recruitment process and availability of internships to guide Fellows appropriately and aid in their internship offers.

The other evaluation tool, AI, provided the framework for positively approaching the change and engaging students. AI created a shared exploration of what worked well, and this also supported the continuous improvement approach. Incorporating AI into the evaluation process also demonstrated to the Fellows that they could influence change with a curious and positive mindset.

Advance Community Engagement

Based on this study's experience, three themes emerged to advance community engagement through a CoP: culture, diversity, and power. The researcher initially believed the power dynamics would become prevalent in the partnership. However, as Figure 5.4 shows, culture heavily influenced the design and delivery of the IFP, while an increased focus on diversity emerged throughout the partnership.

Figure 5.4.
Culture, Diversity, and Power Emerged within the CoP
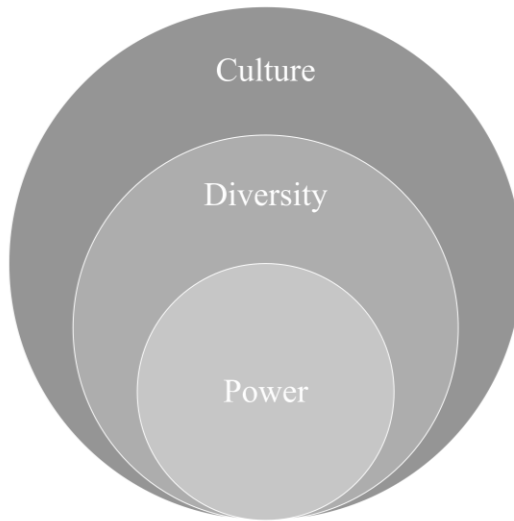
First, industry and academia have different cultures. The differences became apparent in their approach to developing and evaluating the program. For instance, the industry demonstrated passion for process improvement; however, continuing to assess the Fellows after each activity may have been excessive and led to survey fatigue. Additionally, the industry appeared curious and encouraged questions throughout many group interactions. During engagement opportunities with the students, they always included a question and answer session to seek the Fellows' perspective. This experience begins to lay the foundation for how to engage within the industry work environment. Also, by participating in the IFP, the Fellows may experience a competitive edge when they interview for positions because they understand the company language and culture better. Furthermore, the Fellows interact within the industry culture, which may help them decide whether this is an employer of their choice. Additionally, the industry acquires new knowledge about the perception of their culture by prospective talent. As the competition for talent increases, so do plans to attract a highly talented, diverse workforce. The culture influences the learning and decision-making process between university and industry partners.

Second, diversity efforts continue to be a prevalent topic that requires addressing, especially around engaging and developing underrepresented communities. Specifically, it is crucial to be mindful not always to ask the limited underrepresented talent in an organization to help because they can be fatigued from over-participation in workgroups. For instance, in the CoP, the diverse participants were explicitly asked their thoughts or opinions. When there is a limited representation of racially/ethnic diverse on a team, the same people might be called upon to volunteer or provide insight into assignments, therefore, requiring additional preparation on their part. This can lead to challenges to balance personal daily workload and other projects not described in the position description for diverse employees. The same applies to students. Diverse, first-generation students may have additional pressures to engage in community activities, and they may not be aware of what is available for them to explore. Therefore, the CoP intentionally broadened the applicant pool to diverse students and shared the program information with the university Office of First-Generation Students.

Third, power arose as a theme, a clear example of which resulted from conflicting calendar commitments between the industry and Fellows. Some students expressed that they did not want to miss class to attend program activities, while the industry felt they had invested in the students' participation. Another component of power is who has access to being a part of the CoP. The majority of the industry leaders who participated in the CoP contributed funding to establish the program and approached their peers to contribute to the IFP financially. Therefore, the perception is that the industry leaders may feel their voice carries more weight toward the program outcomes. On the other hand, some industry partners were recruited to the CoP because they were emerging leaders, and they benefited from broadening their professional network with influential talent. The emerging leaders may have felt the pressure to balance students' feedback

and their newly formed relationships within their organization. Lastly, the CoP expressed a desire to stay connected with the Fellows upon graduation, however, did not offer additional program funding to support that supplementary programming. After completing the program, if students did not pursue a career with the industry leaders, they may not recognize the long-term benefit of maintaining those relationships. Therefore, they are not interested in continuing a relationship unless another tangible benefit is present. Throughout the program, the power dynamic fluctuated between student and industry needs and desired outcomes.

This study led to a better understanding of how to leverage program evaluation to build a CoP to advance community engagement and improve program outcomes. The CoP joined forces and merged expertise on a shared concern. They utilized multiple tools, Kirkpatrick's four-level model and AI to evaluate and improve the IFP. In general, the evaluation contributed to improvement in outcomes, which led to a better understanding of the Fellows' reactions to programming activities, discovery of acquired learning, application of key learnings (behavior changes), results of full-time employment, and identified lessons learned from engaging in a CoP.

This study began with a broad perspective and incorporated various disciplines and combined evaluation tools. It further suggests a systems approach to develop talent by merging university and industry expertise. Building on the notion that it is value-added to blend disciplines, it is also essential to tailor evaluation tools to meet program expectations. There are three areas, culture, diversity, and power, that surfaced as areas to address when engaging a community. Multiple perspectives are needed to create a talent pipeline. The following section addresses recommendations for systemic change, IFP outcomes, and advancing community engagement to develop a talent pipeline.

Recommendations

This section reflects the systemic changes to develop a talent pipeline and the technical recommendations to improve the IFP outcomes and advance community engagement through a CoP. In general, shared expectations benefit relationships. Therefore, the researcher supports proactive discussion on the parameters influencing the collaboration and engaged scholarship practice. The following section begins with a discussion on establishing guiding principles, evaluating program outcomes based on Kirkpatrick's four-level model and AI, and concluding with community engagement advances.

Systemic Change

Guiding principles supporting the community of practice should create the foundation to making meaningful and sustainable change. Specifically, what are the guiding principles to facilitate the effort to develop talent, and what evidence-based practices exist to support the endeavors? Therefore, the researcher suggests creating a shared understanding of the necessary components to support the work and introduces three concepts: advance communication, engage community, and lead change, as a framework (Figure 5.5) to utilize evaluation within a CoP to develop a talent pipeline.

Figure 5.5.

Guiding Principles to Develop a Talent Pipeline
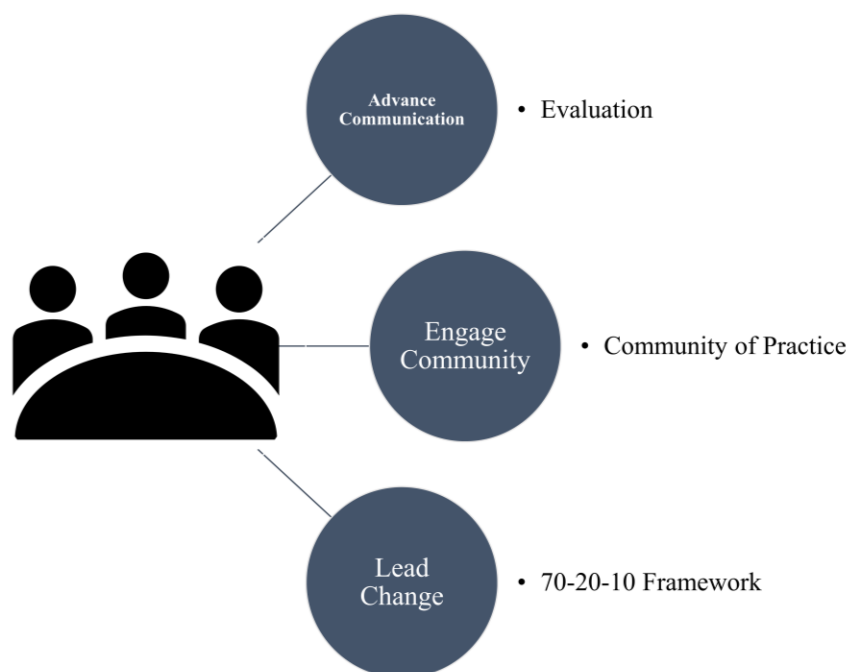
Advance communication. The technical foundation of how to achieve the work is to advance communication. Evaluation can be the tool to engage in conversation about what is working well and what can be improved. It also demonstrates to the participants that their input influences changes in content design and delivery. The evaluation serves as the bridge to support the conversation and establishes a shared language that builds a common purpose. The communication catalyzed and sustained the evaluation and engagement culture. In this case, the CoP reviewed feedback after each activity and implemented adjustments. Additionally, the CoP used AI as an evaluation tool, which positively engaged Fellows in conversations. Without communication, the CoP may not have seen the levels of sustained engagement and evaluation. Advancing communication through the lens of evaluation can further strengthen a foundation to make progress on complex issues.

Engage community. To engage community is emphasizing the importance of establishing a relationship. Everyone can address problems by inspiring personal and professional networks to act. This study created a CoP with industry and academia partners with shared values, such as

a commitment to developing the agriculture workforce. The CoP also engaged the students in their feedback to improve the program content and delivery, thereby expanding the opportunity to learn from others. Engaging a community with different backgrounds and expertise is one way to inspire others to make a difference and further strengthen the evaluation foundation.

Lead change. An intentional approach should emerge to lead change. Everyone can put into practice steps to influence others to make meaningful and sustainable change. In this study, the CoP took the initiative to develop a leadership development program to prepare talent with skills to lead. The CoP leaned on the 70-20-10 framework to design the IFP to engage in experiential, social, and formal learning. This framework blended the cultures and desires of the CoP to create a program to drive change by preparing Fellows with the necessary skills to lead when they emerge in the workforce. In other words, the CoP came together under a broader perspective to influence the development of emerging talent. Leading change by establishing a CoP to construct professional development opportunities for students before entering the workforce is another way to enhance the foundation for evaluation.

Advance communication, engage community, and lead change can guide principles for evaluating a leadership development program designed to develop a talent pipeline through a CoP. The framework creates the groundwork to engage interested parties in addressing a mutual concern. Furthermore, it establishes a model to engage in the work and builds a common language amongst the CoP.

IFP Improvements

This section commences with procedural recommendations to improve the IFP and starts with Kirkpatrick's four-level model (reaction, learning, behavior, and results). In the reactions stage, Fellow's desired increased interaction. In the future, formal learning activities can

incorporate small-group discussions where Fellows and industry can discuss topics in pairings of four to five per team and join a large group reflection. This practice creates an environment of trust and smaller learning communities. The CoP benefits from this approach because they can apply those learnings in their professional settings. Therefore, the CoP can shift the way they show up in the workforce.

In the learning stage, continuous learning emerged as a theme. However, to further enhance the Fellows' experiences, the IFP could introduce a semester project where they work with their peers to identify a current problem impacting the industry and make recommendations. This activity would allow the Fellows to practice critical thinking and communication skills and further enhance their experiential learning. Furthermore, by engaging in a current problem, the Fellows influence industry best practices, leading to improved processes and procedures.

The Fellows identified changes in their behaviors. There are two recommendations to improve behavior changes: incorporate an individual 360-degree feedback process and better match Fellows with industry partners. An individual 360-degree performance assessment can occur at the beginning of the program to establish the Fellow's competencies to improve. The industry coach can guide the conversation based on the results. At the end of the program, another assessment to acquire feedback can demonstrate if changes occurred. By incorporating a 360-degree feedback process, the industry partner is also learning or enhancing a skill that may aid their professional development. Another component is to improve the pairing of coaches with Fellows. The IFP should reassess the process and consider matching Fellows with industry partners with similar backgrounds (gender, race/ethnicity), career interests, majors, and university alumni. The Fellows may be inspired if they engage with someone who looks like them, and the industry employee may see a renewed sense of excitement to pay it forward by

mentoring someone with a similar background. Additionally, the pairing may also lead to a more robust understanding of issues and how to navigate successfully. This match can help with the retention of existing employees in the industry.

The results stage concluded that the CoP could improve the Fellow's conversion rate to intern and the intern to a full-time employee. One suggestion to improve the conversation rate is to shift the program to the sophomore year. The Fellows would experience the same program components and increased their exposure and understanding of the industry partner, which would improve their competitive edge. This approach would also strengthen the talent pipeline from freshman to sophomore status since the industry partner has another university program focused on acclimating students to the company.

Appreciative inquiry is a tool to advance dialogue. The CoP could further embed AI practices in other aspects of the program. The open-ended questions that evaluated the reactions, learning, and behavior changes could utilize the AI framework. For example, instead of asking "what can be improved?" the AI approach would reframe the question to, "what is one thing that would heighten your experience?" Another way to incorporate AI into the overall program is to train the industry coach on the practice. The coach can then use AI questions during their monthly interactions with the Fellows. This tactic would integrate AI practices into multiple facets of the IFP and teach the industry partners a different skill they can use in their professional environment.

Evaluation practices supported a culture of continuous improvement and provided the structure to obtain multiple perspectives. The CoP set the expectation that they were interested in improving the Fellows' experiences and outcomes of the IFP. In this study, Kirkpatrick's four-level model and AI served as valuable tools.

Advance Community Engagement

In the pursuit of community engagement, researchers should recognize the components that aid in moving practices forward. In this study, three themes emerged from lessons learned to advance community engagement: culture, diversity, and power, and the recommendations follow. Each area surfaced recommendations for a CoP considering building a talent pipeline.

The CoP culture influenced the program development and evaluation. However, the CoP should set realistic expectations for collecting data. For instance, instead of an electronic survey, conclude each activity with a discussion on what worked well and what can be improved. Furthermore, develop a plan to share the information with the Fellows with action items, responsibility, and requested due dates to demonstrate the commitment to improvements. Additionally, this process will ensure the culture of continuous improvement and close the feedback loop, which impacts all participants' learning.

Diversity continues to be a focus in the modern workforce. If the industry partner expects to attract a highly talented, diverse workforce, it should also consider diversifying the industry leaders' participation to meet its desired demographic outcomes. For instance, it might consider engaging prospective talent with similar backgrounds in the coaching program. However, workload balance is an essential consideration when leveraging a workforce with limited diversity. The industry should be aware of all the additional responsibilities underrepresented employees participate in to support company initiatives. This awareness may help underrepresented employees with issues of overcommitting and underdelivering. Talent pipelines can build a diverse workforce, and this approach may benefit existing and emerging leaders within the industry.

The power dynamics emerged in the industry and Fellows' relationship and within the CoP. During the interview process, Fellows were not aware of the monthly time commitment to participate in the IFP. Therefore, the program should set expectations in the recruitment process and reaffirm during the interview process. The Fellows received a calendar of events in the fall semester; however, they received the scholarships in the fall semester after participation in two program activities. The CoP created a one-year IFP, and the industry partner expressed strong desires to continue the relationship after the program concluded. Therefore, a CoP should negotiate additional program components beyond one year. Furthermore, the Fellows can stay engaged and mentor the next cohort, or the industry can provide additional mentoring for them.

Future Research

In this study, engaging a community created the space to understand better how evaluation is utilized within a CoP to develop a talent pipeline. The implications are to create an agile framework that supports three functions: advance communication, engage community, and lead change when designing a leadership development program that creates a talent pipeline. The model will create a structure to navigate multiple perspectives.

As the program continues, an obvious opportunity for future research would be grounded in evaluating multiple cohorts to advance communication. The CoP should explore the possibility of a longitudinal study comparing and contrasting information from the Fellows to establish trends. The lessons learned from each cohort can refine the program and help other industries and university partners create similar programs. Additionally, a comparison of the IFP recruitment efforts to internal employment practices should occur. For example, how does the conversion rate to attract diverse talent in the IFP compare to typical industry recruitment

efforts? Also, considering IFP retention rates with the industry partner's traditional recruitment hires could shed light on the program's long-term impact.

To further engage a community, a component not previously discussed is the employee engagement of industry employees who engaged in the IFP. For instance, does participating in a CoP to develop emerging leaders impact the employees' continued satisfaction or commitment to their employer? Another question is what type of impact on industry employees participating in a CoP has on internal emerging diverse leaders and their access to senior leadership? Some members of the CoP were diverse and early-career professionals who broaden their professional network by participating in this CoP. How does this exposure impact their professional development and network?

The CoP can broaden its professional network with other similar programs across the nation to lead change. There are leadership development programs at other land-grant institutions sponsored by corporate partners who share a similar passion for equipping future talent (Melvin et al., 2019). Suppose corporate sponsors are committed to lifting entire industries with proactive leadership development activities. Why not share knowledge and experiences to continue improving the program outcomes - specifically, collaborating with university partners to prepare emerging talent.

Summary

Based on the increase of innovative practices and community engagement between the university and industry partners to develop a talent pipeline, the results describe the value in creating a community of practice. A collaboration engages the industry and demonstrates their commitment to the learning and development of emerging leaders. Furthermore, community engagement creates a space to reconnect with alumni interested in giving back to the university

through energy and funding. The impact on industry employee engagement should not be

overlooked.

References

Ag Growth Summit, C. (2019, March 12). *Ag Growth Summit.* Kansas Agriculture Growth: https://agriculture.ks.gov/docs/default-source/ag-growth-summit/january-2018-documents/2019-growth-book_final_web.pdf?sfvrsn=69298ac1_8

Arthur, L. (2016). Communities of practice in higher education: Professional learning in an academic career. *International Journal for Academic Development, 21*(3), 230-241.

Association of Public & Land-grant Universities, S. (2020, October 2). *Land-Grant University FAQ*. Association of Public & Land-grant Universities: http://www.aplu.org/about-us/history-of-aplu/what-is-a-land-grant-university/

Barge, J. K. (2016). Crossing boundaries between communication activism research and applied communication research discourses. *International Journal of Communication, 10*, 4000-4008.

Barge, J. K., & Schockley-Zalabak, P. (2008). Engaged scholarship and the creation of useful organizational knowledge. *Journal of Applied Communication Research, 36*(3), 251-265.

Barge, J. K., Jones, J. E., Kensler, M., Polok, N., Rianoshek, R., Simpson, J. L., & Shockley-Zalabak, P. (2008). A practitioner view toward engaged scholarship. *Journal of Applied Communication Research, 36*(3), 245-250.

Benjamin, L. (2003). Recruiting for the "new workplace": Strategies for luring the best talent from a shrinking workforce. *Journal of Housing and Community Development, 60*(4), 14.

Boulmetis, J., & Dutwin, P. (2011). *The ABCs of Evaluation: Timeless Techniques for Program and Project Managers.* Indianapolis, IN: John Wiley and Sons, Incorporated.

Bryson, J. M., & Patton, M. Q. (2015). Analyzing and Engaging Stakeholders. In K. Newcomer, H. P. Hatry, & J. S. Wholey, *Handbook of Practical Program Evaluation* (pp. 36-59). Indianapolis, IN: John Wiley and Sons, Incorporation.

Buitrago, C. (2015, November 19). *Framing program evaluation: Why we should tinker with theories of change and logic models.* Harvard Family Research Project: https://archive.globalfrp.org/family-involvement/publications-resources/framing-program-evaluation-why-we-should-tinker-with-theories-of-change-and-logic-models

Carroll, B., Ford, J., & Taylor, S. (2015). Leadership learning and development. In B. Carroll, *Leadership: Contemporary critical perspectives* (pp. 89-108). London, England: Sage Publishers LTD.

Chen, H.-T. (1996). A comprehensive typology for program evaluation. *American Journal of Evaluation, 17*(2), 121-130.

Chikeleze, M., Johnson, I., & Gibson, T. (2018). Let's Argue: Using Debate to Teach Critical Thinking and Communication Skills to Future Leaders. *Journal of Leadership Educators, 17*(2), 123-137.

Chrislip, D. D., & O'Malley, E. (2013). *For the common good: Redefining civic leadership.* Wichita, KS: KLC Press.

Coghlan, A. T., Preskill, H., & Tzavaras, T. (2003). An overview of appreciative inquiry in evaluation. *New Directions for Evaluation, 100*, 5-22.

Cooperrider, D. L., & Whitney, D. K. (2005). *Appreciative inquiry a positive revolution in change.* San Francisco, CA: Berrett-Koehler.

Cousin, G., & Deepwell, F. (2005). Designs for network learning: A communities of practice perspective. *Studies in Higher Education, 30*, 57-66.

Davidson, E. J. (2004). *Evaluation Methodology Basics: The Nuts and Bolts of Sound Evaluation.* Thousand Oaks, CA: Sage Publications, Inc.

Day, D. V. (2010). *The Sage handbook of leadership.* Thousand Oaks, CA: Sage Publications.

Day, D. V., & Liu, Z. (2019). What is wrong with leadership development and what might be done about it? In R. E. Riggio, *What's wrong with leadership? Improving leadership research and practice* (pp. 226-240). New York: NY: Routledge.

Day, D., & Harrison, M. M. (2006). *Encyclopedia of career development.* Thousand Oaks, CA: Sage Publications.

Eich, D. (2008). A grounded theory of high-quality leadership programs: Perspectives from student leadership development programs in higher education. *Journal of Leadership and Organizational Studies, 15*(2), 176-187.

Evergreen, S. D. (2013). *Effective Data Visualization.* Los Angeles, CA: Sage Publications, Inc.

Fairhurst, G. T., & Grant, D. (2010). The social construction of leadership: A sailing guide. *Management Communication Quarterly, 24*(2), 171-210.

Foucault, M. (1977). *Language, Counter-memory, Practice: Selected Essays and Interviews.* Ithaca, NY: Cornell University Press.

Fraser, N. (1989). *Unruly practices: Power, discourse, and gender in contemporary social theory.* Minneapolis, MN: University of Minnesota Press.

Fullard, F. (2007). A model to evaluate the effectiveness of enterprise training programmes. *International Entrepreneurship Management*, 263-276.

Gardner, P. (2018). *Recruiting Trends 2018-2019 48th Edition.* Collegiate Employment Research Institute: http://www.ceri.msu.edu/wp-content/uploads/2018/10/Recruiting-Trends-2018-19-Part-II.pdf

Gavazzi, S. M., & Gee, E. G. (2018). *Land-Grant Universities For The Future.* Baltimore, Maryland: Johns Hopkins University Press.

Gherardi, S., & Nicolini, D. O. (1998). Toward a social understanding of how people learn in organizations: The notion of situated curriculum. *Management Learning, 29*, 273-297.

Greene, J. C. (1994). Qualitative Program Evaluation. *Handbook of Qualitative Research*, 530-544.

Greenhaw, L. L., & D'Abreau Denny, M. (2020). When technical skills aren't enough: Training for the softer side of community action leadership. *Journal of Leadership Education, 19*(1), 29-36.

Hammond, S. A. (2013). *The Thin Book of Appreciative Inquiry.* Bend, OR: Thin Book Publishing.

Hanson Smart, D., & Mann, M. (2013). Incorporating appreciative inquiry methods to evaluate a youth development program. *New Directions For Evaluation, 100*, 63-74.

Harriott, J. (2019). The case for agile workforce planning. *People and Strategy, 42*(4), 10.

Jackson, H. G. (2017, May 30). *The war for talent is now a way of life for HR.* Society for Human Resource Management: http://www.shrm.org/hr-today/news/hr-magazine/0617/pages/the-war-for-talent-is-now-a-way-of-life-for-hr.aspx

Jacobsgaard, M. (2003). Using appreciative inquiry to evaluation project activities of a nongovernmental organization supporting victims of trauma in Sri Lanka. *New Directions for Evaluation, 100*, 53-62.

Johnson, R. B., & Christensen, L. (2017). *Educational Research: Quantitative, Qualitative, and Mixed Approaches.* Los Angeles, CA: Sage Publications.

Johnson, S. J., Blackman, D. A., & Buick, F. (2018). The 70:20:10 framework and the transfer of learning. *Human Resource Development Quarterly, 29*, 383-402.

Kapp, S. A., & Anderson, G. R. (2018). *Agency-Based Program Evaluation: Lessons from Practice.* Thousand Oaks, CA: Sage Publications, Inc.

Kaufman, R., & Keller, J. M. (1994). Levels of evaluation: Beyond Kirkpatrick. *Human Resource Development Quarterly, 5*(4), 371-380.

Kaufman, R., Keller, J., & Watkins, R. (1996). What works and what doesn't: Evaluation beyond Kirkpatrick. *Performance and Instruction, 35*(2), 8-12.

Kennedy, P. E., Chyung, S. Y., Winiecki, D. J., & Brinkerhoff, R. O. (2013). Training professionals' usage and understanding of Kirkpatrick's level 3 and level 4 evaluations. *International Journal of Training and Development, 18*, 1-21.

Kirkpatrick, D. (1998). *Evaluating training programs: The four levels.* San Francisco, CA: Berrett-Koehler.

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation.* Danvers, MA: Association for Talent Development.

Kislov, R., Harvey, G., & & Walshe, K. (2011). Collaborations for leadership in applied health research and care: Lessons from the theory of communities of practice. *Implementation Science, 64*(6), 1-10.

Koc, E. (2018, February 1). *Is there really a skills gap?* National Association of Colleges and Employers: http://www.naceweb.org/talent-acquisition/trends-and-predictions/is-there-really-a-skills-gap/

Krueger, R. A., & Casey, M. A. (2015). Focus Group Interviewing. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, *Handbook of Practical Program Evaluation* (pp. 506-534). Indianapolis, IN: John Wiley & Sons, Incorporated.

Kuhn, T. S. (2012). *The Structure of Scientific Revolutions: 50th Anniversary Edition.* Chicago, IL: University of Chicago Press.

Lombardo, M. M., & Eichinger, R. W. (2017). *The leadership machine: Architecture to develop leaders for any future.* Minneapolis, MN: Lominger International: A Korn/Ferry Company.

Magruder Watkins, J. (2011). *Appreciative Inquiry: Change at the Speed of Imagination.* San Francisco, CA: John Wiley and Sons, Incorporated.

Marshak, R. J., & Grant, D. (2008). Organizational discourse and new organization development practices. *British Journal of Management, 19*(1), 7-19.

Mathison, S. (2005). *Encyclopedia of Evaluation.* Thousand Oaks, CA: Sage Publications.

McCall, M., Lombardo, M., & Morrison, A. (1988). *The lessons of experience: How successful executives develop on the job.* Lexington, MA: Lexington Books.

McCormick, M., & Dooley, K. E. (2005). Leadership education in a community of practice. *Journal of Leadership Education, 4*(2), 16-26.

McGregor, S. L. (2018). *Understanding and Evaluating Research: A Critical Guide.* Thousand Oaks, CA: Sage Publications.

McLaughlin, J. A., & Jordan, G. B. (2015). Using Logic Models. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey, *Handbook of Practical Program Evaluation* (pp. 62-87). Indianapolis, IN: John Wiley & Sons, Incorporated.

McLean, S., & Moss, G. (2003). They're happy, but did they make a difference? Applying Kirkpatrick's framework to the evaluation of a national leadership program. *The Canadian Journal of Program Evaluation, 18*(1), 1-23.

McNamee, S. (2003). Appreciative evaluation within a conflicted educational context. *New Directions For Evaluation, 100*, 23-40.

Melvin, E. M., Bowles, D., & Steele, A. (2019). Fostering a relationship with a corporate sponsor to grow an engineering leadership development program. *American Society for Engineering Education* (p. 27481). Tampa, FL: 126th American Society for Engineering Education Conference.

Mercer. (2016, April 11). *Bridging the gap between employers' and employees' needs is key to "future-proofing" HR*. https://www.mercer.com/newsroom/global-talent-trends-2016.html

Mertens, D. M., & Wilson, A. T. (2019). *Program evaluation theory and practice.* New York: NY: The Guilford Press.

Morrill, A. (1862, July 2). *Morrill Act Public Law, 37-108.* General Records of the United States Government: National Archives: https://www.ourdocuments.gov/doc.php?flash=false&doc=33

National Association of Colleges and Employers, S. (2018, February 19). *Are college graduates "career ready"?* National Association of Colleges and Employers: http://www.naceweb.org/career-readiness/competencies/are-college-graduates-career-ready/

National Association of Colleges and Employers, S. (2019, August 22). *Diversity recruiting reaches highest level in 11 years.* National Association of Colleges and Employers: http://www.naceweb.org/diversity-equity-and-inclusion/trends-and-predictions/diversity-recruiting-reaches-highest-level-in-11-years

National Association of Colleges and Employers, S. (2020, July 27). *More strategies for maintaining a talent pipeline.* National Association of Colleges and Employers: http://www.naceweb.org/talent-acquisition/best-practices/more-strategies-for-maintaining-a-talent-pipeline/

National Research Council. (1995). *Colleges of agriculture at the land grant universities: A profile.* Washington, DC: The National Academies Press.

Nelson, E., & Dodd, W. (2017). Collaborating for community food security: Emerging scholar participation in a community-university partnership. *Action Research, 15*(4), 402-423.

Newstrom, J. (1978). Catch-22: The problems of incomplete evaluation training. *Training and Development Journal, 32*(11), 22-25.

Newstrom, J. (1995). Reviews. *Human Resource Development Quarterly, 6*(3), 317-320.

Omidvar, O., & Kislov, R. (2014). The evolution of the communities of practice approach: Toward knowledgeability in a landscape practice- An interview with Etienne Wenger-Trayner. *Journal of Management Inquiry, 23*(3), 266-275.

Ospina, S. M., & Uhl-Bien, M. (2012). Exploring the competing bases for legitimacy in contemporary leadership studies. In M. Uhl-Bien, & S. M. Ospina, *Advancing relational leadership research: A dialogue among perspectives* (pp. 1-40). Charlotte, NC: Information Age Publishing, INC.

Palmer, J. C., Birchler, K., Narusis, J., Kowalchuk, R., & DeRuntz, B. (2016). LEADing the way: A review of engineering leadership development programs. *American Society for Engineering Education* (p. #17096). New Orleans, LA: American Society for Engineering Education 123rd Annual Conference and Exposition.

Patton, M. Q. (1996). A world larger than formative and summative. *American Journal of Evaluation, 17*(2), 131-144.

Patton, M. Q. (2003). Inquiry into appreciative evaluation. *New Directions for Evaluation, 100*, 85-98.

Patton, M. Q. (2017). *Evaluation Flash Cards: Embedding Evaluative Thinking.* St. Paul, MN: Otto Bremer Trust.

Pearl, A. J. (2014). Predicting community engagement? The Carnegie Foundation's elective classification. *Journal of Community Engagement and Scholarship, 7*(2), 51-60.

Post, M. A., Ward, E., Longo, N. V., & Saltmarsh, J. (2016). *Publicly engaged scholars.* Sterling, VA: Stylus.

Preskill, H., & Tzavaras Catsambas, T. (2006). *Reframing Evaluation Through Appreciative Inquiry.* Thousand Oaks, CA: Sage Publications.

Priest, K. P., Kliewer, B. W., & Stephens, C. M. (2018). Kansas leadership studies summit: Cultivating collaborative capacity for the common good. *Journal of Leadership Educator, 17*(3), 195-207.

Putnam, R. D. (1995). Tuning in, turning out: The strange disappearance of social capital in America. *Political Science and Politics, 28*(4), 664-683.

Raelin, J. A. (2016). Imagine there are no leaders: Reframing leadership as collaborative agency. *Leadership, 12*(2), 131-158.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A Systematic Approach.* Thousand Oaks, CA: Sage Publications.

Roupnel, S., Rinfre, N., & Grenier, J. (2019). Leadership development: Three programs that maximize learning over time. *Journal of Leadership Education, 18*(2), 126-143.

Russ-Eft, D. F., & Preskill, H. (2001). *Evaluation in Organizations: A Systematic Approach to Enhancing Learning, Performance, and Change.* Cambridge, Massachusetts: Perseus Publishing.

Russ-Eft, D., & Preskill, H. (2005). In search of the holy grail: Return on investment evaluation in human resource development. *Advances in Developing Human Resources, 7*(1), 71-85.

Saldana, J. (2016). *The coding manual for qualitative researchers.* Thousand Oaks, CA: Sage Publications.

Sanchez, I., Ospina, S., & Salgado, E. (2020). Leadership advancing constructionist leadership research through paradigm interplay: An application in the leadership-trust domain. *Leadership, 16*(6), 683-711.

Sandmann, L. R., & Kliewer, B. W. (2012). Theoretical and applied perspectives on power: Recognizing processes that undermine effective community-university partnerships. *Journal of Community Engagement and Scholarship, 5*(2), 20-28.

Schockley-Zalabak, P., Barge, J. K., Lewis, L., & Simpson, J. L. (2017). Engaged Scholarship. *The International Encyclopedia of Organizational Communication, 2*, 802-821.

Schultz, M., & Hatch, M. J. (1996). Living with multiple paradigms: The case of paradigm interplay in organizational culture studies. *Academy of Management Review, 21*(2), 529-557.

Scriven, M. (1967). The Methodology of Evaluation. In R. Tyler, R. Gagne, & M. Scriven, *Perspectives of Curriculum Evaluation* (pp. 39-83). Chicago, IL: Rand McNally.

Scriven, M. (1996). Types of Evaluation and Types of Evaluators. *American Journal of Evaluation, 17*(2), 151-161.

Seemiller, C. (2018). Enhancing leadership competencies for career readiness. *New Directions for Student Leadership, 157*, 39-53.

Smith, S., Kempster, S., & Wenger-Trayner, E. (2019). Developing a program community of practice for leadership development. *Journal of Management Education, 43*(1), 62-88.

Snook, S. A., Khurana, R., & Nohria, N. (2012, June 20). Teaching Leadership: What we know. *Harvard Business Review*.

Steensma, H., & Groeneveld, K. (2010). Evaluating a training using the four levels model. *Journal of Workplace Learning, 22*(5), 319-331.

Steinberg, K. S., Hatcher, J. A., & Bringle, B. G. (2008). Civic-minded graduate: A north star. *Michigan Journal of Community Service Learning, 18*, 19-33.

Strier, R. (2013). Fields of paradox: University-community partnerships. *Higher Education, 68*, 155-165.

Tucker, E. (2019). How to modernize workforce planning. *People and Strategy, 42*(4), 14.

Tzavaras Catsambas, T., & Webb, L. D. (2003). Using appreciative inquiry to guide an evaluation of international women's media foundation Africa program. *New Directions for Evaluation*, 41-52.

Umble, K. E. (2007). Evaluation for planning and improving leadership development programs. In K. M. Hannun, J. Martineau, & C. Reinelt, *The handbook of leadership development evaluation* (pp. 464-486). Jossey-Bass.

Van de Ven, A. (2007). *Engaged Scholarship: A Guide for Organizational and Social Research.* New York, NY: Oxford University Press.

W K Kellogg Foundation. (2004). *Evaluation handbook.* Battle Creek, MI: W.K. Kellogg Foundation.

Watkins, K. E., Hyberstsen Lyso, I., & deMarrais, K. (2011). Evaluating executive leadership programs: A theory of change approach. *Advances in Developing Human Resources, 13*(2), 208-239.

Weaver, K., & Olson, J. K. (2006). Understanding paradigms used for nursing research. *Journal of Advanced Nursing, 53*(4), 459-469.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity.* New York, NY: Cambridge University Press.

Wenger, E. (2010). Communities of Practice and Social Learning Systems: The Career of a Concept. In C. Blackmore, *Social Learning Systems and Communities of Practices* (pp. 179-198). Milton Keynes, England: Springer Verlag and the Open University.

Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating Communities of Practice.* Boston, MA: Harvard Business School Publishing.

Zaza, S., Harris, A., Arik, M., & Geho, P. (2019). The roles parents, educators, industry, community, and government play in growing and sustaining the STEM workforce. *Journal of Higher Education Theory and Practice, 19*(8), 114-130.

Zimmerman- Oster, K., & Burkhardt, J. (1999). *Leadership in the making: Impact and insights from leadership development programs in U.S. colleges and universities.* Battle Creek, MI: W.K. Kellogg Foundation.

Appendix A - Theory of Change and Logic Model

Figure A.1.

Theory of Change and Logic Model

Theory of Change Statement: The Fellows program creates a supportive environment to prepare and empower Fellows to lead in the community. If the university and industry partners collaborate to create and evaluate a leadership development program and incorporate continuous improvement throughout program activities, then the Fellows will experience professional development that strengthens their ability to lead.

Stakeholders and Resources	Activities	Outputs	Outcomes		Impacts
			Short term up to 6 months	**Medium term 6-12 months**	**Long term greater than 12 months**

University

Leadership, curriculum, instructors, expertise, classroom, Qualtrics survey system, library access, and time

Industry

Leadership, curriculum, facilitators, expertise, funding, site visit locations, networks, and time

Fellows

Leadership, experiences, participation, feedback and time

Fellows Program

Collaboration with university and industry partners with shared vision and goals. Creation of a community of practice (CoP) with 12 participants from university and industry leaders. The CoP will routinely meet

Development of educational activities to learn university and industry culture and establishment of a common language between partners to move initiatives forward

Establish a theory of change to create a program with curriculum and evaluation components to inform continuous improvement

1) Twelve members of the CoP will meet quarterly for 60 minutes, the two sub-teams within the CoP will meet monthly for approximately 45 minutes each to co-create activities and evaluate experiences
2) Establish coaching program, train coaches to engage in six to eight monthly coaching sessions for approximately 30 minutes
3) Development and execution of four sessions to create a leadership lecture series: Leadership Expectations, Accelerate your Interview Talents, Inclusion and Diversity, and Emotional Intelligence
4) Create program agenda and objectives for three industry site visits
5) Creation of up to five case studies
6) Design a leadership development binder with self-reflection activities

Fellows identify and participate in two service learning events

Twenty Fellows participate in monthly activities

1) CoP collaborates monthly. The CoP builds awareness, consensus, and engagement in the program
2) Based on research and best practices, development of a leadership development program using 70-20-10 framework
3) Based on research and best practices, development of an evaluation plan using Kirkpatrick four-level model of learning and appreciative inquiry
4) Fellows involved in monthly leadership development experiences
5) CoP understand the importance of proactively preparing Fellows to lead upon entering the workforce

1) Expand partnership with CoP, increase involvement of CoP, continuous improvement to program content and delivery
2) Measure Fellows reaction, learning, behaviors, results using Kirkpatrick four-level model and appreciative inquiry
3) CoP value Fellows feedback and acknowledges progress in Fellows' leadership capacity. CoP make continuous improvements to the program content and delivery

1) Strengthen the quality of leadership capacity of 20 Fellows and expand the quantity of Fellows joining the workforce with industry partners
2) Engage community, advance communication, and lead change with university and industry partners through a practice of community engagement

Assumptions
Industry wants to proactively create leaders entering the workforce.
Providing explicit learning activities lead to enhancement of leadership capacity.
Developing students with leadership skills benefit the agricultural industry.

External Factors
Social and economic factors impacting students and industry participation.
Competition from graduate school and other industry career opportunities.
Prior experiences in leadership roles.
Concurrent leadership program experience.

Appendix B - Leadership Development Activities

Table B.1.

Leadership Development Activities

70-20-10 framework			Leadership Development	Kirkpatrick's four-level model			
Experiential	Coaching	Training	Description of Questions	Reaction	Learning	Behavior	Results
4 hrs			***Case studies*** require learners to confront difficult, complex problems that have no single, obvious solution. A case is a compelling story designed to prompt meaningful questions about leadership and decision-making dilemmas. Case studies will allow students to wrestle with real-life challenges and increase their leadership capacity.	X	X		
24 hrs			***Site visits*** communicate essential aspects of an industry partner. Site visits will allow the students to engage with industry leaders and tour offices, workspaces, and facilities. Through each site visit's progression, students will job shadow industry leaders and better understand industry culture and values.	X	X		
6 hrs			***Service-learning*** is an experience for Fellows to develop civic engagement skills by participating in volunteer events in the community they reside. Fellows will collaborate with community leaders and gain valuable experience working with diverse community members.			X	
		10 hrs	***Coaching*** is an ongoing, confidential, one-on-one partnership between the Fellow and Industry Coach to identify, prioritize, and achieve the Fellow's desired goals. The coaching engagement aims to help the Fellow maximize their potential and enhance personal and professional effectiveness.	X		X	

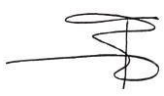|							
		6 hrs	*Leadership lecture series* are leadership development programs to advance the students' knowledge, skills, and abilities. The series focused on leadership development activities that help students understand and apply leadership knowledge and skills to strengthen personal and professional performance.	X	X		
			Fellows received offers and accepted internships with industry partners.				X
			Fellows received offers and accepted full-time positions with industry partners.				X
			Overall program content and delivery review	X	X	X	X

Appendix C - IRB Proposal 9869.1 Approval

Figure C.1.

IRB Proposal 9869.1 Approval

KANSAS STATE UNIVERSITY | University Research Compliance Office

TO: Dr. Mary Tolar
        Leadership Studies
        Leadership Studies Building

FROM: Rick Scheidt, Chair
        Committee on Research Involving Human Subjects

DATE: 05/01/2020

RE: Proposal #9869.1, entitled "Quality and quantity of leadership capacity through University and Industry partnership."

 MODIFICATION OF IRB PROTOCOL #9869, ENTITLED, "Quality and quantity of leadership capacity through University and Industry partnership"

        EXPIRATION DATE: 09/26/2022

The Committee on Research Involving Human Subjects (IRB) has reviewed and approved the request identified above as a modification of a previously approved protocol. **Please note that the original expiration remains the same.**

All approved IRB protocols are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews may also be performed during the course of this approval period by a member of the University Research Compliance Office staff. Unanticipated adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB, and / or the URCO

It is important that your human subjects activity is consistent with submissions to funding / contract entities. It is your responsibility to initiate notification procedures to any funding / contract entity of any changes in your activity that affects the use of human subjects.

Appendix D - Survey and Focus Group Questions

Table D.1.

Survey and Focus Group Questions

Case Studies

Survey	Scale	Kirkpatrick's four-level model			
Questions	Likert	Reaction	Learning	Behavior	Results
How well did the case study meet your expectations?	5-point scale from extremely satisfied to extremely dissatisfied	X			
Describe the major concepts that you learned during the case study.	Open-ended question		X		
How can the session be improved?	Open-ended question	X			

Note. Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2016

Site Visits

Survey	Scale	Kirkpatrick's four-level model			
Questions	Likert	Reaction	Learning	Behavior	Results
How well did the site visit meet your expectations?	5-point scale from extremely satisfied to extremely dissatisfied	X			
Did you leave with a better understanding of the industry?	Yes or No		X		
How can the session be improved?	Open-ended question	X			

Note. Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2016

Service Learning

Survey	Scale	Kirkpatrick's four-level model			
Question		Reaction	Learning	Behavior	Results
*I have a responsibility and a commitment to use the knowledge and skills I have gained as a college student to collaborate with others, who may be different from me, to help address issues in society. Considering your education and experiences as a college student, explain the ways you agree or disagree with this statement and provide examples when relevant.	Open-ended question			X	

Note. *Steinberg et al., 2008 narrative inter-rater reliability .83.

Coaching Mid-Year and End of Year Check-In

Survey	Scale	Kirkpatrick's four-level model			
Questions	Likert	Reaction	Learning	Behavior	Results
*I met with my Cargill Coach for at least 30 minutes a month	5-point scale from strongly agree to strongly disagree			X	
*I was an active participant in the Cargill Coaching Program	5-point scale from strongly agree to strongly disagree			X	
*Looking back, how could the coaching program be improved?	Open-ended question	X			
**I have had the occasion to use what I learned in the coaching session	5-point scale from strongly agree to strongly disagree			X	
**Looking back, how could the coaching program be improved?	Open-ended question	X			

Note. *Represents mid-year check-in and **reflect the end of year check-in

Leadership Lecture Series

Survey	Scale	Kirkpatrick's four-level model			
Questions	Likert	Reaction	Learning	Behavior	Results
How well did the leadership lecture series meet your expectations?	5-point scale from extremely satisfied to extremely dissatisfied	X			
Describe a key learning moment after participating in the session	Open-ended question		X		
How can the session be improved?	Open-ended question	X			

Note. Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2016

Internship Opportunities

Survey		Kirkpatrick's four-level model			
Questions	Percentage	Reaction	Learning	Behavior	Results
Fellows received internship offers with industry partners.	Conversion rate				X
Fellows accepted internships with industry partners.	Conversion rate				X

Full-time Employment

Survey		Kirkpatrick's four-level model			
Questions	Percentage	Reaction	Learning	Behavior	Results
Fellows received full-time offers with industry partners.	Conversion rate				X
Fellows accepted full-time positions with industry partners.	Conversion rate				X

Overall Program Review Incorporating Appreciative Inquiry

Focus Group	Scale	Kirkpatrick's four-level model			
Questions		Reaction	Learning	Behavior	Results
Think back on your experience in the program. What was your most memorable learning experience from the program? (discover stage)	Open-ended question	X			
Let's think about the future. In what ways would you like to continue to develop your ability to lead others? (dream stage)	Open-ended question		X		
It's been weeks since you participated in your last program activity. How can you leverage your learnings from this program in a way that will help strengthen your leadership capacity? (design stage)	Open-ended question		X		
How have you applied those key learnings in your interactions with others? (destiny stage)	Open-ended question			X	

Note. Kirkpatrick & Kirkpatrick, 2016; Preskill & Tzavaras Catsambas, 2006

Appendix E - Indicator/Success Standards

Table E.1.

Indicator/Success Standards

Program Activity	Research Question	Indicator/ Standard	Success Standard
Case Studies	1) What were participant's reactions to program activities? 2) What learning did participants' acquire after completion of program activities?	1) reaction; 2) learning	At the end of the activity: 1) 80% of responses will reflect a positive level of satisfaction and reflect on how to improve the session; 2) reflect new knowledge acquired
Site Visits	1) What were participant's reactions to program activities? 2) What learning did participants' acquire after completion of program activities?	1) reaction; 2) learning	At the end of the activity: 1) 80% of responses will reflect a positive level of satisfaction and reflect on how to improve the session; 2) 80% of responses will reflect they have a better understanding of the industry
Service-learning	1) What were participant's reactions to program activities? 3) What changes in behaviors did participants implement?	1) reaction; 3) behavior	At the end of the activity: 1) 80% of responses will reflect a positive level of responsibility and commitment to address issues in society; 3) reflect on ways they agree or disagree with their responsibility and commitment
Coaching	1) What were participant's reactions to program activities? 2) What learning did participants acquire after completion of program activities? 3) What changes in behaviors did participants implement?	1) reaction; 2) learning; 3) behavior	At the end of the activity: 1) 80% of responses will reflect a mutual level of trust and reflect on how to improve the session 2) 80% of responses will reflect new knowledge acquired; 3) 80% of responses will reflect active participation with the program

Leadership Lecture Series	1) What were participant's reactions to program activities? 2) What learning did participants' acquire after completion of program activities? 3) What changes in behaviors did participants implement?	1) reaction; 2) learning; 3) behavior	At the end of the activity: 1) 80% of responses will reflect a positive level of satisfaction and reflect on how to improve the program; 2) reflect new knowledge acquired; 3) reflect changes in behaviors
Internship	4) What are the results of the program relating to offers of internships?	4) results	At the end of the program, 50% of Fellows will be offered internships, and 50% will accept internships with industry partners
Full-time Positions	4) What are the results of the program relating to full-time offers of employment?	4) results	At the end of the program, 50% of Fellows will be offered full-time positions, and 50% will accept full-time jobs with industry partners
Overall Program	1) What were participant's reactions to program activities? 2) What learning did participants' acquire after completion of program activities? 3) What changes in behaviors did participants implement? 4) What are the results of the program relating to full-time offers of employment?	1) reaction; 2) learning; 3) behavior; 4) results	At the end of the program: 1) 80% of responses will reflect a positive level of satisfaction and reflect on how to improve the program; 2) reflect new knowledge acquired; 3) reflect changes in behaviors; 4) results of internships and full-time conversation rates

Appendix F - Kansas Site Visit Agenda

Table F.1.

Kansas Site Visit Agenda

9:30 am	Leadership Welcome at Headquarters
9:45 am	Program Review and Objectives
10:15 am	Who is the Industry and Whom do they Serve?
11:00 am	Entry into the Industry: Intern/Associate programs
12:00 pm	Lunch and Panel Discussion: Career Paths in Industry
1:15 pm	Depart for Tour at Innovation Center
1:30 pm	Tour: Innovation Center
2:15 pm	Leave for Plant Tour
2:30 pm	Plant Tour
4:00 pm	Adjourn

Appendix G - Nebraska Site Visit Agenda

Fellows travel the evening before and stay at a hotel. Upon arrival, the Fellows participate in a dinner and prepare for the next days' event.

Table G.1.

Nebraska Site Visit Agenda

9:00 am	Plant tour
10:30 am	Site summary of roles and responsibilities
11:30 am	Lunch
12:30 pm	Job Shadowing
2:00 pm	Panel discussion
3:00 pm	Departs

Appendix H - Missouri Site Visit Agenda

Table H.1.

Missouri Site Visit Agenda

9:00 am	Introductions of Industry partner and businesses/functions performed at this site
10:00 am	Job shadow #1
11:00 am	Job shadow #2
12:10 pm	Lunch and panel discussion
1:00 pm	Entry level position discussion
2:00 pm	Commute to Plant
2:30 pm	Plant tour
4:00 pm	Departure

Appendix I - CoP Sample Agenda

Table I.1.

CoP Sample Agenda

Time	Activity	Topic	Responsible Team Members
5 minutes	**Good News** Highlight Accomplishments Safety/Inclusion Moment	• Thank you, Missouri team, for hosting the site visit • Fellows participated in Dr. MLK Jr. Day of Serving • Recruitment of next cohort in progress • CoP reflects	
40 minutes	**Roundtable**	FYA: Plan final case study • March 24th at 4:30 p.m.-6:30 p.m. Questions: What is a topic that will allow Fellows to demonstrate their systems thinker/strategic leadership expectation? Is there another leadership expectation we want to focus on exploring? What leadership challenge will this case study address? Should we provide the Fellows the topic in advance and ask them to come prepared to present on the issue? Who would like to join us virtually? FYF: Review feedback from leadership lecture series: emotional intelligence.	
5 minutes	**Forward Events/Planning**	FYI: Interview/select next cohort, April 3, 2020 FYI: End of year celebration April 23, 2020	

FYI - For Your Information
FYA - For Your Action
FYF - For Your Feedback