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Examining Academic Partnerships: An Explanatory Sequential Design of the Perceptions and
Impacts of Homeland Security's Engagement with Higher Education Institutions

A Dissertation

Presented to the Faculty of the
Department of Public Policy & Administration
West Chester University
West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for the
Degree of
Doctor of Public Administration

By

Frederick W. Turner II

April 2024

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Dedication

For my wife, Emily, and my two daughters, Ashlyn and Lianna

Acknowledgments

I would like to thank the people who have assisted me in making this dissertation possible. I want first to thank my committee chair, Dr. Mia Ocean, for your mentorship and time. Thank you for being my biggest supporter in this research and finishing this dissertation. I will forever be grateful for your academic guidance and motivation. Committee member Dr. Richard Gregory Johnson III, you were the first person to assist me in starting my journey in this doctoral program and have been supportive from start to finish; I thank you. Committee member Dr. Kristen Crossney, thank you for your guidance at the start of the program and for your support in completing this research.

I would like to thank my wife, Emily, for your patience and encouragement throughout this entire journey to achieving this academic goal; I love you. To my daughters Ashlyn and Lianna, you both are too young to understand this academic undertaking; I hope to inspire you when you are older. I also want to thank my mother, Kathy Turner, and my father, Fred Turner, who always pushed and motivated me to never settle and never give up; I love you.

Abstract

This dissertation examines the perceptions and impacts of the Department of Homeland Security's (DHS) academic partnerships with higher education institutions through an explanatory sequential mixed-methods design. The study focuses on academic administrators' perceptions of these partnerships, assessing how social equity considerations are integrated into recruitment metrics and exploring how these metrics vary across institutions of different sizes, types, and locations. Key findings indicate that while perceptions of the partnership's effectiveness were mixed, there was a notable emphasis on the potential of these collaborations to enhance workforce diversity and meet public sector needs effectively. Additionally, the research identifies a theoretical framework that aptly characterizes the impact of such partnerships, emphasizing the alignment between academic institutions' goals and DHS workforce demands. By integrating quantitative data analysis with a qualitative interview and document analysis, this research contributes to the field of public administration by providing evidence-based recommendations for enhancing workforce diversity and developing robust academic-government collaborations. The outcomes underscore the importance of these partnerships in bridging the gap between academia and public sector needs, particularly in fostering a skilled and diverse workforce capable of tackling contemporary challenges.

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Chapter 1: Introduction

The U.S. federal government confronts a labor shortfall, especially given the increasing need for a diverse and highly educated workforce (Benavides et al., 2013). Over the years, the strategy of employing internships to create job opportunities and offer students practical experience has gained recognition (Benavides et al., 2013). The 112th Congress acknowledged this shortage by enacting the Federal Internship Improvement Act in December 2011, aiming to enhance the value of internships to bridge the theory–practice gap.

Beyond legislative efforts, the executive branch undertook measures to address the pressing issue of labor scarcity. The establishment of the Office of Academic Engagement (OAE) in 2011, under Executive Order 13562, intended to strengthen the ties between the federal government and the academic community while addressing the prevalent labor shortages (U.S. Department of Homeland Security [DHS], 2023). I focus in this study on the OAE, implemented by the DHS through its academic partnership initiative, with the primary objective of fostering an educated, diverse workforce capable of addressing the federal government’s employment gap (DHS, 2023).

Federal government employees over 40 years of age generally secure employment and receive higher pay as they age compared to the rest of the nation’s labor force, yet racial and gender pay disparities persist within this demographic (J. Heckman, 2022). The U.S. Equal Employment Opportunity Commission (EEOC; 2020b) reported that the federal government’s workforce aged 40 and above receives higher pay and exhibits more diversity than the rest of the labor market; 72% of federal employees were aged 40 and older in 2017, compared to 54% of civilians. The federal government is the nation’s largest employer, with over 3 million employees; an estimated 70% of its permanent general schedule workforce over 40 years old,

and the average age of federal civilian employees is 47.5 years (J. Heckman, 2022; EEOC, 2020b).

Confronting a labor shortfall exacerbated by the demand for a diverse and highly educated workforce, the U.S. federal government faces significant challenges in fulfilling the current and future demands of public sector employers (Benavides et al., 2013; DHS, 2023; J. Heckman, 2022). Despite initiatives like the Federal Internship Improvement Act (2011) and the establishment of the OAE (DHS, 2023), evaluating the effectiveness of these strategies remains a critical need. In the evolving landscape of public sector employment, partnerships between academic institutions and the DHS are pivotal in shaping a workforce that is diverse, skilled, and equipped to meet contemporary challenges (Busch & Givens, 2012; Committee on the Department of Homeland Security Workforce Resilience, Board on Health Sciences Policy, & Institute of Medicine, 2013; Eggers et al., 2019; Karoly & Panis, 2004).

Problem Statement

A significant research gap exists within the field of public administration that describes academic administrators' perceptions of DHS partnerships, integrating social equity considerations into recruitment metrics for students and recent graduates, and the variations in these equity-focused recruitment metrics across academic institutions of various sizes, types, and locations (Eliophotou Menon, 2021; Iordache-Platis, 2016; Nanyanzi et al., 2021). In addition, there is no existing theoretical framework that characterizes the impact of DHS partnerships with academic institutions that may foster a diverse public sector workforce.

Purpose of the Research

I examined and explored academic partnerships between academic institutions and the DHS within the public sector employment landscape. I examined academic administrators'

perceptions of these partnerships, focusing on their role in developing a diverse and skilled workforce. I assessed the integration of social equity considerations into recruitment metrics for students and recent graduates, supporting a diverse workforce initiative. Additionally, I explored how equity-focused metrics vary across institutions of different sizes, types, and locations to identify patterns or discrepancies. I aimed to identify a theoretical framework in public administration that characterizes the impact of these partnerships on fostering a diverse public sector workforce. I provided insight into the effectiveness of collaborations in promoting diversity within the federal workforce and contributing to a more inclusive and representative public sector employment environment by addressing gaps in understanding these partnerships' efficacy and outcomes.

Research Questions

RQ1: What were the perceptions of academic administrators regarding the academic partnership with DHS?

RQ2: How did academic institutions incorporate social equity considerations in their recruitment metrics for current students and recent graduates to support the diverse workforce initiative?

RQ3: How do these equity-focused metrics vary based on institutional size, type, and location?

RQ4: Given the research results, which theoretical framework most aptly characterizes the impact of academic partnerships with the DHS in fostering a diverse public sector workforce?

Value of Topic to Public Administration

The contributions to the field of public administration are multifaceted and encompass various aspects crucial for effective governance. Collaboration frameworks have been pivotal in bridging the gap between academic institutions and public sector entities, fostering a skilled and diverse workforce capable of tackling contemporary challenges. This collaboration has not only strengthened ties but also facilitated the development of evidence-based policy and program recommendations, addressing labor shortages, fostering diversity, and promoting social equity within the public domain. Additionally, recruitment strategies have been refined to prioritize inclusivity and equity, ensuring that the public sector attracts a broad spectrum of talent essential for innovation and responsiveness. Furthermore, there has been a significant emphasis on adaptability to demographics and geography, with diversity initiatives tailored to suit the unique needs of different academic institutions and geographic locations. These insights have enabled scalable and effective outcomes, enhancing the overall effectiveness of public administration efforts. Moreover, the identification of theoretical frameworks has provided a conceptual foundation for understanding the impact of academic partnerships on public sector workforce diversity, laying the groundwork for future research and policy analysis in the field of public administration.

Table 1*Contributions to the Public Administration Field*

Aspect	Description
Collaboration frameworks	Strengthening collaboration between academic institutions and public sector entities, instrumental in developing a skilled and diverse workforce capable of addressing contemporary public administration challenges (EEOC, 2020a)
Policy and program development	Providing evidence-based recommendations for policymakers and program designers to address labor shortages, foster diversity, and ensure social equity within the public domain (EEOC, 2020a)
Recruitment strategies	Highlighting the development of inclusive and equitable recruitment strategies, crucial for attracting a broad spectrum of talent essential for innovation and responsiveness in the public sector (Ricucci, 2018)
Adaptability to demographics and geography	Delivering insights on customizing diversity initiatives to suit the unique needs of various academic institutions and geographic locations, ensuring scalable and effective outcomes (Ricucci, 2018)
Theoretical framework identification	Identifying a theoretical framework that accurately captures the impact of academic partnerships on public sector workforce diversity, providing a conceptual foundation for future research and policy analysis in public administration (EEOC, 2020a)

In this dissertation I contribute to public administration by shaping policy development, program implementation, and strategic planning, focusing on enhancing workforce diversity and operational efficacy in the public sector. In addition, I address the four pillars of public administration.

The Four Pillars of Public Administration

Integrating the four pillars of public administration—economy, efficiency, effectiveness, and social equity—is essential in addressing the workforce gap and fostering a diverse and educated workforce (Denhardt & Denhardt, 2015). Efficiency is critical, as it requires maximizing the outcomes of the DHS academic partnership initiative by using resources

optimally, minimizing waste, and streamlining processes (Osborne, 2017). In addition, the effectiveness of internships is needed to bridge the theory–practice divide and address labor scarcity (Benavides et al., 2013). Effectiveness is vital for DHS academic programs as they aim to foster an educated and diverse workforce capable of addressing the federal government’s employment gap (Denhardt & Denhardt, 2015). By examining student success rates, recruitment to the federal workforce, and the cultivation of essential skills, I assessed the programs’ ability to achieve the government’s goals of creating a diverse federal workforce (Rainey, 2014). Social equity is crucial to this research study, as the DHS academic partnership initiative is intended to create a diverse workforce (Denhardt & Denhardt, 2015).

Incorporating the four pillars of public administration into this research study provides an analysis of the DHS academic programs and their role in addressing the workforce gap and fostering a diverse and educated workforce. I offer insights for policymakers and educators, informing future initiatives and enhancing the OAE programs’ effectiveness and contributing to developing best practices and evidence-based recommendations to improve public administration in the broader context.

Definition of Terms

It is important to define several key terms used in this research to ensure clarity. The following essential terms are explained below.

Academic administrators: College and university administrators who manage student support, academic programs, and scholarly research within higher education institutions (U.S. Bureau of Labor Statistics, n.d.).

Academic partnership: Collaboration between diverse entities to achieve shared goals, enhance education, and pool resources. These alliances foster innovation, knowledge sharing, and mutual benefits for all parties involved (G. King & Persily, 2020).

Department of Homeland Security: A U.S. federal agency established in 2002 in response to the September 11, 2001, terrorist attacks. Its primary mission is to protect the United States and its territories from threats like terrorism, natural disasters, and cyberattacks (DHS, n.d.-a).

Diverse workforce initiative: A DHS program that promotes diversity and inclusion by recruiting and retaining individuals from underrepresented communities (DHS, n.d.-c).

DHS academic programs: Academic initiatives or educational programs offered by DHS that focus on various areas related to homeland security, emergency management, cybersecurity, and other relevant fields (DHS, 2023).

Federal workforce: The collective body of employees working within the U.S. federal government, including individuals employed by federal agencies and departments to perform governmental functions and services (Partnership for Public Service, 2021).

Office of Academic Engagement (OAE): Manages the sole education council encompassing DHS (n.d.-b). The OAE coordinates the DHS secretary's interactions with academic institutions and facilitates roundtable discussions between educational associations and top DHS officials.

Program efficacy: Conclusions about a program's results, derived from testing a strategy in strictly monitored scientific settings, which might limit the scope to specific types of participants, the kinds of services provided, and other similar factors (APA, 2018).

Conclusion

In this study I address the challenges related to labor scarcity, the increasing demand for a diverse and skilled workforce within the federal government, and the initiatives of the OAE. I examine and explore various federal government initiatives aimed at reducing the federal employment gap, thereby providing a thorough understanding of the problem statement that underpins this research. Despite initiatives like the Federal Internship Improvement Act (2011) and the creation of the OAE, it is crucial to evaluate the effectiveness of DHS academic programs in addressing employment gaps in the federal sector. I assess the effectiveness of these academic partnerships in developing a competent and diverse public sector workforce and identify any barriers to their success.

I laid the groundwork by presenting an in-depth examination of the problem statement, offering valuable insights into the background, emphasizing the study's relevance and significance, and delineating critical terms in Chapter 1. I examine the historical events that have molded the U.S. federal government's current internship initiatives and hiring practices, focusing on the DHS and its distinct recruitment strategies in Chapter 2. I contribute to a richer contextual understanding of the government's efforts and the evolution of its workforce development approaches by including a review of relevant literature. Chapter 3 presents the research methodology and data-gathering methods for this study. Lastly, I present the study's findings in Chapter 4, while the implications for present and future practices are explored in Chapter 5.

Chapter 2: Literature Review

In December 2011, the 112th Congress ratified the Federal Internship Improvement Act. This development underlines the recognized significance of internships as a strategic vehicle for job creation, as highlighted by Benavides et al. (2013). The facilitation of internships within public institutions and governmental bodies provides the essential platform for students to aggregate theoretical knowledge with practical experiences, thus preparing them for successful induction into the public sector. I examined the inception and development of the Pathways Program, an initiative by the federal government, and other parallel academic efforts, including the Presidential Management Fellowship (PMF) Program, federal work-study programs, co-op programs, and additional initiatives to build the federal workforce. Government initiatives are primarily aimed at addressing the issue of labor scarcity while simultaneously fostering diversity within the workforce (Benavides et al., 2013).

I critically appraised the academic programs offered through the DHS academic partnership, focusing on DHS's concerted efforts to nurture an educated and diversified workforce. I used the literature review to analyze the current employment gap in the federal government sector, characterized by a shortage of skilled labor and an increasing number of retirements. The shortage of skilled labor and the increasing number of retirees affect the government workforce and its ability to deliver quality public services efficiently (Ferguson & Hoover, 2024). I explored initiatives like the Pathways Program, which was created to attract, train, and retain talent to fill this gap. My analysis focused on the effectiveness of such programs in enhancing workforce diversity, skill development, and long-term retention. Ultimately, I aimed to provide insights into potential improvements for these initiatives and suggest

complementary strategies to enhance the federal government's approach to addressing staffing challenges.

Conceptual Framework

Academic Partnerships

Berry-James (2024) discussed the importance of diversity, equity, inclusion, and accessibility (DEIA) among academic stakeholders and citizens, emphasizing the role of academic institutions in shaping the future of public policy, public affairs, and public administration. This perspective underscores the significance of academic partnerships in advancing homeland security goals through collaborative efforts and shared knowledge (Berry-James, 2024). To expand further, relating to homeland security, Haughton and Romaniuk (2023) detailed how the DHS collaborates with U.S. government agencies, international governments, businesses, and the academic community to address the needs of the homeland security enterprise. This highlights the breadth of academic partnerships supporting national and global security efforts (Haughton & Romaniuk, 2023).

U.S. Department of Homeland Security (2021) delved into a media literacy project supported by a DHS grant, underscoring the synergy between academic circles and government bodies in meeting the project's aims. Their study illustrated how academic partnerships are instrumental in fortifying homeland security endeavors, especially in critical areas such as media literacy, which is essential for enhancing public awareness and ensuring safety. Furthermore, the collaboration emphasized integrating educational frameworks with national security efforts to cultivate a well-informed and resilient public (U.S. Department of Homeland Security, 2021).

Bridging the insightful discussions on academic partnerships by Berry-James (2024) and Haughton and Romaniuk (2023) underscores a broader narrative. The emphasis on collaborative

endeavors, whether fostering diversity and inclusion within academic settings or engaging with governmental and international entities, marks a pivotal shift toward a more integrated approach to addressing homeland security challenges. This confluence of academic expertise and practical applications exemplifies a dynamic partnership model that meets immediate security needs but also champions the cause of public awareness and safety through educational initiatives.

Transitioning from these tangible examples of partnership and collaboration, the discourse naturally progresses to the foundational elements that underpin such research and initiatives: the theoretical frameworks.

These frameworks, as expounded by Eisenhart (1991) and further elaborated upon by scholars like Lovitts (2005) and Mertens (1998), serve as the bedrock for understanding, investigating, and analyzing the complex interplay between academic partnerships and homeland security efforts. The journey from collaborative projects to theoretical underpinnings encapsulates the multidimensional facets of academic and practical pursuits, highlighting the significance of a well-established theoretical base in enriching both the discourse and the outcomes of research in homeland security and beyond.

Theoretical Frameworks

Eisenhart (1991) defined a theoretical framework as a structure that underpins research by leveraging a formal theory constructed through a comprehensive, persuasive elucidation of specific phenomena and relationships. Consequently, the theoretical framework comprises the judiciously chosen theory (or theories) that buttress one's cognitive approach concerning one's comprehension and intention to investigate the topic alongside the pertinent concepts and definitions emanating from that theory about one's subject matter.

According to Lovitts (2005), specific criteria should be followed when applying or developing theory in a dissertation. These criteria include relevance to the topic, logical construction, deep comprehension, and alignment with the research question. Scholars must meticulously delineate and illustrate a theoretical framework concomitantly with the initial conceptualization of the dissertation theme. Esteemed philosophers such as Sire (2004, p. 35) have advocated for “pretheoretical commitments” by researchers, thereby explicitly pinpointing one’s “worldview of the heart rather than the mind.” Lastly, the researcher’s theory selection must be explicitly articulated and overtly referenced in the nascent dissertation composition stages. Mertens (1998, p. 3) posited that the theoretical framework possesses profound implications for every decision rendered throughout the research process. All research intrinsically embodies theoretical underpinnings. The importance of theory-driven cognition and action cannot be overstated when it comes to selecting a topic, formulating research questions, focusing on the literature review, designing the methodology, and creating the analytical framework for a dissertation study.

Anderson et al. (2006, p. 154) stressed the imperative of incorporating a robust theoretical foundation in a dissertation by quoting a dissertation supervisor who proclaimed, “I don’t see how you can do a good piece of work that’s atheoretical.” In a parallel vein, Sarter (2006, p. 494) expounded on the “limited usefulness of findings and conclusions” without a theoretical framework justifying a study. Evidence spanning diverse fields demonstrates the need to explicitly identify and integrate a theoretical framework for rigorous research.

Social Equity Theory

The theory of social equity serves as a model for analyzing and understanding the principles of fairness and justice in societal interactions and frameworks. This theory

underscores the equitable allocation of resources, chances, and responsibilities within a community, with a special focus on guaranteeing that groups facing marginalization and disadvantage are treated justly and have equal outcomes. John Rawls (1971), a prominent scholar in social equity, put forward the principle of justice as fairness. His seminal work is crucial for grasping modern social equity strategies, highlighting the necessity of equally distributing resources and opportunities to enable all individuals' full participation in societal life.

Social equity pertains to equitable and impartial practices within public administration, ensuring every societal member has identical opportunities, services, and resources (Frederickson, 1990). It highlights the responsibility of public administrators in fostering equity and justice, striving to mitigate and correct societal disparities. This notion is vital in exploring how public governance can influence and improve social justice and equity.

Sen (1999) broadened the dimensions of social equity by incorporating the ideas of capabilities and functional freedoms, providing a more detailed perspective on what constitutes a fulfilling life. Sen's methodology diverges from simply distributing resources to focusing on the real opportunities and capabilities available to individuals. Fraser (2005) significantly added to the conversation by presenting *participatory parity*, advocating for equal involvement of all community members. Fraser emphasized tackling economic, cultural, and political inequalities to attain social equity. Lastly, Nussbaum (2011) introduced the capabilities approach with Sen (1999), which stressed the significance of personal dignity and the liberty to pursue well-being. This provides a practical framework for evaluating social justice and equity (Nussbaum, 2011).

Workforce Development Theory

Workforce development theory is a multidisciplinary approach that enhances individuals' skills, knowledge, and abilities to meet labor market demands and foster economic growth

(Hillage & Pollard, 1998). Workforce development theory underscores the significance of collaboration among employers, educational institutions, and government agencies in nurturing a competitive workforce. Key components of the theory include human capital development (Becker, 1993; Schultz, 1961), employer engagement (Field, 2001; Wilson, 2013), and equity and inclusion (K. King & Palmer, 2010). Applying workforce development theory to the public sector can create practical initiatives to address labor shortages and encourage a skilled and diverse workforce.

Support for Workforce Development Theory

Workforce development theory has garnered substantial support in recent literature, emphasizing its role in promoting economic growth, individual employability, and organizational performance. Studies have underlined the benefits of collaboration between educational institutions, employers, and governments in enhancing skill development and workforce readiness (Bessen, 2019; Mota & Scott, 2014). Research also demonstrates that human capital development and lifelong learning contribute to productivity, economic growth, and adaptability to changing labor market demands (Abel & Deitz, 2019; Cedefop, 2020; Field, 2001). Furthermore, equity and inclusion-focused workforce development initiatives can result in social cohesion, reduced income disparities, and access to quality jobs for underrepresented populations (K. King & Palmer, 2010; Pager & Shepherd, 2008).

Criticisms of Workforce Development Theory

Critics of workforce development theory have expressed concerns about its narrow focus, potential to exacerbate inequalities, overemphasis on individual responsibility, and difficulties in engaging employers (McGrath, 2012). McGrath (2012) claimed that the theory's prioritization of immediate labor market needs may neglect long-term worker well-being and social development.

Additionally, workforce development initiatives may inadvertently worsen social inequalities by catering to specific population segments, often favoring those with higher skills and education (Allegretto et al., 2022). Critics have also asserted that the theory stresses individual responsibility for skill acquisition, overlooking structural barriers and social factors influencing access to quality education and job opportunities (Adelman & Taylor, 2017). Finally, involving employers in workforce development initiatives can be challenging due to their limited resources, time, or expertise to contribute to training and skill development (Gospel & Lewis, 2011).

Workforce Development: A Key to Economic Growth and Sustainability

Workforce development is integral to a thriving economy, aimed at aligning workers' existing skills with employers' specific requirements. Alignment facilitates employment and paves the way for improved wages and career advancement (Calimanu, 2023). The imperative for continuous learning is evident in contemporary economies characterized by constant evolution—driven by technological innovations, market dynamics, and global events. Formal education and vocational training offer specialized courses tailored to the needs of the labor market, from computer programming to healthcare (Rainie & Anderson, 2017). However, the nuances of job roles also necessitate practical experiences, such as on-the-job training, internships, or mentorships. A holistic approach to workforce development is orchestrated through targeted policies and strategic collaborations among businesses, educational entities, nonprofits, and government agencies (Coleman, 2023). As a result, economies experience growth, unemployment diminishes, and societal benefits such as social mobility and reduced crime manifest (Calimanu, 2023). Ultimately, workforce development transcends the mere

satisfaction of employer needs, representing a broader narrative of societal progress and individual empowerment (Perez-Johnson & Holzer, 2021).

Understanding the Significance of Workforce Development

For economies to thrive, a skilled and competent workforce is essential (Bersin, 2016). Globalization and technological advancements become more evident. Businesses require workers with relevant skills to adapt to changing environments and to leverage new opportunities (Bersin, 2016). A nation that prioritizes workforce development enjoys higher productivity, greater global competitiveness, and lower unemployment rates. Workforce development is not just about job training, but involves a broader spectrum of activities, such as the following:

- Aligning the education system with industry needs ensures that graduates possess marketable skills right from the outset (Symonds et al., 2011).
- After completing formal education, workers need continuous learning opportunities to stay relevant with evolving technology and industry standards.
- Collaborative initiatives can lead to the development of industry-specific curricula, ensuring that students are prepared for employment upon graduation (Carnevale et al., 2010).

However, there are challenges to effective workforce development. The mismatch between available skills and employer needs is common (ManpowerGroup, 2020). Many industries report difficulty finding qualified candidates, not because there are no applicants but because many need additional skills. Governments and industry leaders must prioritize investment in vocational and technical education programs to address the skills gap. Apprenticeships, for example, offer a practical approach to training, as they combine classroom instruction with on-the-job experience (Lerman, 2013). Collaboration between industries and

educational institutions can also ensure that curricula are up-to-date and align with current industry needs. Soft skills, such as critical thinking, problem-solving, and communication, are increasingly valuable in the modern workplace (Robles, 2012). As such, these competencies should be integrated into workforce development programs.

Inclusive Workforce Development

In economic growth and workforce development, an inclusive approach is paramount to harnessing the full potential of human capital. Inclusive workforce development ensures that every individual, regardless of gender, ethnicity, socioeconomic status, or physical abilities, has equitable access to training and employment opportunities. Inclusive workforce development aligns with the principles of social justice, emphasizing that access to opportunities should not be constrained by factors beyond an individual's control (Sen, 1999). Inclusive workforce development can address systemic disparities, increase industry diversity, and promote economic growth. From a business perspective, diverse teams are more innovative and better at problem-solving, driving performance and productivity (Rock & Grant, 2016). To harness these benefits, policies and programs must intentionally reduce barriers and promote access for historically marginalized groups.

Inclusive workforce development ensures that all population segments, regardless of gender, ethnicity, disability, or socioeconomic background, have equal training and employment opportunities (International Labour Organization, 2017). Inclusive workforce development is crucial for several reasons.

- **Tapping untapped talent:** Many segments of the population are underrepresented in specific industries. By focusing on inclusivity, employers can access a larger talent pool.

- Addressing structural inequities: Historically marginalized groups often lack access to quality education and training opportunities. By prioritizing inclusivity in workforce development, administrators and hiring managers can begin to address these long-standing disparities.
- Economic growth: A more inclusive labor force can lead to a more robust and diversified economy. When more people can contribute their skills and talents, productivity and innovation tend to rise (Page, 2007).

Workforce development is crucial for the prosperity and competitiveness of nations. Countries can bridge the skills gap, enhance productivity, and foster economic growth by aligning education with industry needs, offering ongoing professional development, and fostering collaboration between industries and educational institutions. Investing in the workforce is investing in the future. Incorporating inclusivity and leveraging technology in workforce development strategies ensures a comprehensive approach. As work evolves, so must the strategies to prepare the workforce. By championing inclusivity and harnessing the power of technology, it will be possible to create a resilient, adaptable workforce ready for future challenges.

The Office of Personnel Management

The federal government aims to exemplify DEIA, ensuring all employees are treated with dignity and respect (U.S. Office of Personnel Management [OPM], 2022). Because the federal government is the largest U.S. employer, building a diverse workforce is crucial, as well as improving recruitment, hiring, development, promotion, and retention; removing barriers to equal opportunity; and setting a national standard for DEIA excellence. A diverse workforce requires the collective effort of public servants across all agencies and levels. The OPM is the

federal government's primary human resources management and policy development agency. Federal agencies receive human resources leadership and support, including employee management, retirement benefits, healthcare, insurance, merit-based hiring, and secure employment processes, which ultimately help these agencies serve the American people (OPM, 2022).

The Office of Diversity, Equity, Inclusion, and Accessibility (ODEIA) within OPM is the leading resource in the federal government for DEIA (OPM, 2022). The ODEIA provides federal agencies with practical strategies and tested methods to attract, employ, develop, retain, and engage a diverse and highly motivated workforce while fostering an environment focused on achieving their goals. The ODEIA investigates policy alternatives, government-wide data patterns, and employee survey results that influence OPM's administration of DEIA initiatives across the federal government from both business and public sector standpoints. Federal departments and agencies are best equipped to serve the American people by attracting and retaining skilled individuals from all backgrounds (Partnership for Public Service, 2021). As a result, ODEIA disseminates evidence-based methodologies and tactics, drawing from examples in federal agencies, the private sector, local governments, and academia to promote and incorporate DEIA practices throughout the federal government. Additionally, the ODEIA guides departments and agencies in achieving their diverse missions while maintaining a strategic emphasis on DEIA, allowing those agencies and departments to adapt to changing workforce demographics, enhance services for all populations, and foster innovation to address and resolve the challenges of the 21st century (OPM, 2022).

Federal supervisors and managers hire qualified staff for federal service (OPM, 2008). Some agencies see traditional hiring methods as a barrier to attracting suitable candidates. The

Homeland Security Act of 2002 introduced two hiring flexibilities to address this hiring method: category rating and direct-hire authority (OPM, 2008). These flexibilities, complementing existing ones, could improve agencies' recruitment (OPM, 2008). The Office of Management and Budget funded an OPM study to assess how agencies use these flexibilities. The study analyzed data from an online survey from 2004 to 2007. The findings, shared with chief human capital officers, reflected the usage of eight appointing authorities, including the new ones. These authorities help agencies to hire candidates when traditional methods are impractical. The eight appointing authorities were

- direct-hire authority
- Federal Career Intern Program
- PMF Program
- individuals with mental retardation, severe physical disabilities, or psychiatric disabilities
- Student Career Experience Program
- Veterans Employment Opportunities Act of 1998, as amended
- veterans recruitment appointment
- 30% or more disabled veterans appointing authority

The collaborative endeavors of the OPM and the ODEIA showcase the federal government's dedicated pursuit of DEIA objectives among its employees. With their in-depth strategies and policy frameworks, these agencies have established a robust foundation to cultivate an inclusive work environment that cherishes diversity and champions equality. This groundwork is essential, as it not only boosts the productivity and creativity of the federal workforce but also serves as a reference point for DEIA initiatives in different sectors. Executive

Order No. 14035 (2021) signified a critical juncture in these endeavors, reflecting an intensified and rejuvenated focus on DEIA within the federal workforce. This order highlighted the critical need for a workforce that accurately reflects America's diverse population, stressing the imperative for ongoing enhancements and dismantling obstacles to equal opportunities. Leveraging the solid base provided by OPM and ODEIA, Executive Order No. 14035 sought to propel these values further, ensuring that the federal government exemplified DEIA excellence and continued to draw and retain highly skilled individuals from diverse backgrounds.

Executive Order No. 14035

Executive Order No. 14035, Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce, was signed by President Joe Biden on June 25, 2021. It sought to support DEIA in the federal workforce and help agencies understand the challenges of federal employees and job seekers (EEOC, 2020a). Executive Order No. 14035 (2021, para. 1) includes the following statement:

As the nation's largest employer, the Federal Government must be a model for diversity, equity, inclusion, and accessibility, where all employees are treated with dignity and respect. Accordingly, the Federal Government must strengthen its ability to recruit, hire, develop, promote, and retain our nation's talent and remove barriers to equal opportunity. It must also provide resources and opportunities to strengthen and advance diversity, equity, inclusion, and accessibility across the Federal Government. The Federal Government should have a workforce that reflects the diversity of the American people. A growing body of evidence demonstrates that diverse, equitable, inclusive, and accessible workplaces yield higher-performing organizations.

The EEOC (2020a) also revealed that the federal government has yet to narrow several pay gaps across its workforce, which demonstrated that previous efforts moved in the right direction but more action was needed to diversify the workforce. Federal DEIA accomplishments showcased programs and initiatives that stemmed from the government-wide strategic plan to promote DEIA within the federal workforce. Executive Order No. 14035 (2021) also identified 11 priorities in the strategic plan:

- partnerships and recruitment
- data collection
- professional development and advancement
- expanding employment opportunities for formerly incarcerated individuals
- promoting paid internships
- chief diversity officer
- pay equity
- DEIA training and learning
- advancing equity for employees with disabilities
- advancing equity for LGBTQ+ employees
- safe workplaces

While the EEOC's 2020b findings highlighted ongoing pay disparities within the federal workforce, indicating a need for further diversification and equality, Executive Order No. 14035's (2021) strategic plan, with its 11 priorities, marked a progressive step toward addressing these issues. This plan encompassed a wide range of initiatives, from enhancing recruitment partnerships to ensuring safe workplaces, and it demonstrated a comprehensive approach to fostering DEIA across the federal workforce.

Moving from the broader strategies outlined in Executive Order No. 14035 (2021) to specific legislative protections, the focus shifts to the gender diversity and race pay gap. Federal laws, such as the Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964, established legal safeguards against compensation discrimination, emphasizing the government's long-standing commitment to equal pay (Executive Order No. 14035, 2021). These statutes not only sought to eliminate wage disparities based on gender but also set a legal framework for ensuring fairness and equity in the workplace, reflecting a continuous effort to bridge pay gaps and promote a more inclusive federal workforce (Executive Order No. 14035, 2021).

Gender Diversity and Race Pay Gap

Many federal statutes protect employees' rights against discrimination in compensation, including the Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964 (EEOC, 2021). According to the U.S. Department of Labor (DOL; n.d.-a), in 1963, the Equal Pay Act amended the Fair Labor Standards Act to protect against wage discrimination based on gender. Employers were required to increase wages to equalize pay between men and women who performed similar jobs without reducing the wages of other employees. There is, however, a long way to go before American society achieves pay equity:

The reality though is that in nearly every job—more than 90 percent of the occupations—women still earn less than men: 82 cents on the dollar on average. For AAPI [Asian American and Pacific Islander] women, it's 87 cents for every dollar a White man earns. For Black women, it's 63 cents. For Native American women, it's 60 cents. For Hispanic women, it's 55 cents. (Exec. Order No. 14035, 2021, para. 12)

Based on the OPM data for 2017, male federal employees earned 7% more than their female counterparts (U.S. Government Accountability Office [GAO], 2020). According to the

EEOC (2020b), women in the federal workforce earned \$0.93 for every dollar earned by men in 2017. The average salary for women in 2017 was \$81,213, while the average for men was \$86,301 (EEOC, 2020b). According to the GAO (2020), the pay gap for Black, Hispanic, and Alaska Native/American Indian women is still more significant than for White men. For example, Black women earn 12% less than White men, while Hispanic or Latina women earn 9% less than White men (GAO, 2020). At specific agencies, unaccounted-for factors contribute to pay gaps between men and women. These disparities vary depending on the organization.

Gender Diversity

Table 2 represents the gender diversity overview of the total workforce profile from fiscal year (FY) 2017 to FY2021 (OPM, 2022). Table 2 shows the minor changes in the percentages of the total workforce profile's gender categories from FY2021 and the federal workforce's gender categories within the Senior Executive Service (SES). Overall, the data indicate a slight increase in the percentage of women in the total workforce profile from 2017 to 2021, while there has been a corresponding decrease in the percentage of men. The SES, however, has remained male-dominated, although there has been a slight increase in the percentage of women at the SES level from 2018 to 2021. Additionally, there were no employees of unspecified gender in the total workforce profile in 2020 and 2021.

Table 2*Gender Diversity: FY2017–FY2021*

Year	Gender	%	
		SES	Total workforce
2017	Female	34.01	43.38
2017	Male	65.99	56.60
2017	Unspecified	0.00	0.02
2018	Female	33.87	43.52
2018	Male	66.13	56.44
2018	Unspecified	0.00	0.04
2019	Female	34.14	43.72
2019	Male	65.86	56.27
2019	Unspecified	0.00	0.01
2020	Female	34.53	44.10
2020	Male	65.47	55.90
2020	Unspecified	0.00	0.00
2021	Female	37.85	44.44
2021	Male	62.15	55.56
2021	Unspecified	0.00	0.00

Note. SES = Senior Executive Service.

Race Pay Gap

Table 3 represents the racial diversity overview of total workforce profile from FY2017 to FY2021 (OPM, 2022). Table 3 shows the minor changes in the percentages of the total workforce profile's race categories from FY2021 and the federal workforce's gender categories within the SES. Table 3 also shows the percentage of employees in each racial or ethnic category in the federal workforce from FY2017 to FY2021. The data indicate no significant changes in the overall racial or ethnic makeup of the federal workforce during this period. White employees made up the largest group in the workforce, and American Indian or Alaskan Native employees

comprised the smallest group. However, the percentage of employees identified as more than one race increased slightly over the years.

Table 3

Workforce Race and Ethnicity: FY2017–FY2021

Race and ethnicity	%				
	2017	2018	2019	2020	2021
American Indian/Alaskan Native	1.69	1.66	1.64	1.63	1.62
Asian	5.99	6.10	6.19	6.33	6.49
Black/African American	18.15	18.21	18.22	18.23	18.19
Hispanic/Latino	8.75	9.08	9.21	9.38	9.53
More than one race	1.60	1.73	1.83	1.91	2.01
Native Hawaiian/Pacific Islander	0.51	0.52	0.54	0.55	0.56
Unspecified	0.06	0.09	0.20	0.28	0.40
White	63.26	62.63	62.18	61.69	61.20

Public–Private Partnerships

U.S. Secretary of Commerce Gina M. Raimondo recognized the inadequacies of the existing employment system, which she has argued is not correctly connecting workers to open positions (U.S. Chamber of Commerce, 2021). Raimondo advocated for increased emphasis on technical school training during and after high school, suggesting that a 4-year college degree should not be the sole path to employment. She further underscored the necessity for public and private enterprises to collaborate to identify their specific labor needs to reduce worker shortages. She suggested this would involve modifying their hiring practices to align with these needs better (U.S. Chamber of Commerce, 2021).

Public and private businesses must also work together to identify their needs to decrease worker shortages, including changing hiring practices. The Workforce Innovation and

Opportunity Act of 2014 is the nation's primary workforce development law; it outlines the system's accountability markers under current law (U.S. Department of Labor, n.d.-b). Three of the Workforce Innovation and Opportunity Act's six primary indicators measure employment. After program completion, they are most directly correlated with employment, retention, and median earnings. The other indicators measure credential attainment, skills gains, and effectiveness in serving employers.

Under the guidance of Secretary Raimondo, there has been a pivotal movement for public-private partnerships to close the gap between job seekers and available positions through enhanced technical education and updated recruitment methods (Department of Commerce, 2023). This joint venture between government sectors and private industry is designed to adapt workforce training to meet the changing needs of the job market, prioritizing adaptability over conventional academic routes, and is in line with the principles of the Workforce Innovation and Opportunity Act of 2014 (U.S. Department of Labor, n.d.-a). However, the COVID-19 pandemic brought unexpected obstacles, leading to a swift and significant alteration of the employment landscape (Howe et al., 2021). The immediate, drastic effects on job retention and enduring economic impacts revealed the labor market's vulnerability and the pressing need for innovative employment strategies. As the economy started to recover, the persisting outcomes of COVID-19, marked by workforce shortages and evolving job dynamics, underscored the vital importance of public-private partnerships. These collaborations are essential in addressing the current crisis and building a resilient workforce adaptable to future disruptions, ensuring a unified progression of economic revitalization and workforce enhancement.

COVID-19

The national labor market conditions deteriorated rapidly due to the COVID-19 pandemic and the recession in early 2020, which resulted in long-term consequences (Romero et al., 2022). From February to April 2020, the National Bureau of Economic Research identified a recession (Romero et al., 2022). There were 164.5 million people in the labor force in January 2020, with an unemployment rate of 3.5%. As of April 2020, 14.8% of the population was out of work, and 22.1 million jobs had been lost. The labor market has improved substantially since then, but only partially (Romero et al., 2022).

A growing number of industries experienced labor shortages as the economy recovered. As a result of the COVID-19 pandemic, the U.S. economy has been adversely affected, resulting in reduced employment and income, canceled job offers and internships, and personal and business bankruptcies (Elmer, 2020). Consequently, many businesses were forced to close for several months (Elmer, 2020). In addition, approximately 51 million American workers were laid off temporarily or permanently during the summer and spring, while thousands of internships and job offers were lost (Elmer, 2020). Some careers were changed forever, and some young people may have decided that college was too expensive for them. Other individuals may have become unemployed and accepted jobs that did not utilize their skills or talents, resulting in a decrease in their earnings and motivation in the future (Elmer, 2020).

Prior to the COVID-19 pandemic, high school graduates faced detours and dead ends on the way to a bachelor's degree (Elmer, 2020). According to Elmer (2020), approximately 500,000 (i.e., between 3% and 6%) students have dropped out of high school annually. For African American, Latino, and Native American youth, dropout rates were almost double. Approximately 85% of students finished high school and two-thirds of all high school students

attended college. Only 60% of students completed their 4-year degrees within a 6-year period, a figure that fell to 25% for students attending private, for-profit colleges (Elmer, 2020). Elmer predicted that the percentage of college dropouts could worsen in 2023–2024 as the economic effects of the pandemic continued to hinder minorities and low-income students. According to Elmer, families already struggling to pay for college were now in a precarious position.

The general economic trend of 2020 followed the pattern of the two significant downturns in 2001 and 2007 (Elmer, 2020). According to Bhattarai (2023) recent college graduates, like the rest of the labor force, have seen their unemployment rates almost double. Moreover, a quarter of recent graduates who got jobs took part-time jobs or settled for low-skilled, low-paying jobs, a sign of underemployment. These jobless rates declined slowly because laid-off employees were usually the first to be rehired (Elmer, 2020). The significant impact of the pandemic on employment first became evident in March 2020. A study delved into the quarterly changes in employment, segregated by gender, which indicated a more substantial decrease in female employment than the employment of their male counterparts (Clapp, 2023). The disparity was evident at the beginning of the pandemic, where there was nearly a 13% drop in female employment as opposed to a 12% drop for men, both figures compared to the fourth quarter of 2019. The data were obtained from the Quarterly Workforce Indicators dataset provided by the U.S. Census Bureau (Clapp, 2023).

Clapp (2023) revealed that following the initial sharp decline, jobs revived across many industries in the third quarter of 2020. However, returning to normalcy was uneven and occurred faster for men than women. By the third quarter of 2022, male employment had not only recovered but also slightly exceeded prepandemic levels, reaching 104% of the employment

figures for the fourth quarter of 2019. Meanwhile, female employment, recovering slower, finally reached 100% of prepandemic levels (Clapp, 2023).

Cortes and Forsythe (2023) anticipated that the fallout from the COVID-19 pandemic would to further the gap in the federal job market. Traditionally, the public sector, which includes federal jobs, has offered a stable and secure source of employment. However, the pandemic-induced recession has led to budgetary constraints and hiring freezes in many federal agencies, widening the employment gap. The pandemic's economic crisis may exacerbate inequalities in the federal job market, particularly among ethnic-racial minority groups and women, who already face significant challenges in attaining these positions (Cortes & Forsythe, 2023). For instance, job losses in the federal sector due to the pandemic were higher among women and ethnic minorities, disproportionately represented in lower paying federal jobs.

In addition, Elmer (2020) predicted that the disruption of education pathways, an outcome of the pandemic, could have implications for the federal job market. For jobs that require higher education, an increase in college dropouts, particularly among ethnic-racial minority and low-income students, could reduce the pool of eligible candidates for these positions (Elmer, 2020). The gap in the federal job market might expand between those who possess a college degree and those who do not (Elmer, 2020). Furthermore, the increase in underemployment and the broader shift in the labor market could alter the nature of competition for federal jobs. If private-sector opportunities remain limited, more individuals, including those with higher qualifications, may compete for available federal jobs (Elmer, 2020). Competition could increase and worsen inequality in the federal job market. Lastly, the federal job market may also be impacted by changes in labor mobility. The pandemic has prompted a trend toward

remote work, which could expand the geographic pool of candidates for federal jobs, thereby influencing the dynamics of the federal job market (Braesemann et al., 2022).

Pandemic disruptions in education have deepened the divide in the federal job market between degree holders and non-degree-holders. An uptick in college dropouts, particularly among minority and low-income students, could reduce the qualified candidate pool. This, along with shifts toward underemployment and the rise of remote work, could heighten competition and inequality in federal jobs while broadening applicant demographics (Nadworny, 2022).

Simultaneously, the pivot to experiential learning in higher education marks a significant pedagogical shift. By blending real-world experiences with theoretical learning, this approach meets the workforce's and academia's evolving needs. This move toward experiential learning is designed to better prepare students for the modern job market's complexities, adapt to nontraditional learners, and change workforce demands, including those in federal employment.

Experiential Learning

In recent years, a shift from theory-based education to experience-supported theoretical education can be summed up as the mode of teaching and learning in higher education settings (Kapucu & Knox, 2013). Many sociocultural factors contribute to the trend toward experiential learning, including a better understanding of learning theories, the need to respond to community and business needs (Cantor, 1997), and the changing workforce and nontraditional learners in academic settings. One of the most critical scholars of the 20th century was Dewey (1938), who is considered the father of experiential learning. Focusing on education, Dewey praised experiential education, especially when engaging community partners in an academic context. According to Cunningham (1997), experiential learning enhances creativity and motivates students.

Based on Dewey's work, Kolb (1984, p. 38) further developed the experiential learning theory, defining learning as "the transformation of experience into knowledge." Reflective observation and active experimentation are how learners experience and transform experience, whether through concrete experience or abstract conceptualization (Kolb, 1984). Different learning styles are accommodated by these approaches, including *divergers*, who are imaginative and able to explore issues from different perspectives, and *accommodators*, who are hands-on and experience oriented (Kapucu & Knox, 2013). *Assimilators* use inductive reasoning to construct theories, whereas *convergers* use deductive reasoning to solve problems and understand theories through application. Thus, Kolb's framework illustrates a comprehensive learning cycle that caters to learners' diverse cognitive processes and preferences, ensuring a holistic approach to the assimilation and application of new knowledge.

Millennials and Generation Z

The evolving nature of the global workforce poses new challenges and opportunities for organizations, particularly those in the public sector (Fry, 2018). With the inevitable retirement of the Baby Boomer Generation, there has been a demographic shift toward younger workers—notably, Millennials (born between 1981 and 1996) and Generation Z (born from 1997 onwards). These generational cohorts bring fresh perspectives, technological adeptness, and unique career expectations, making their integration into the workforce crucial (Twenge, 2017). Understanding their career motivations and expectations is pertinent, particularly in public sector employment (Becton et al., 2014).

In most cases, managers rate their management skills and knowledge primarily based on experience rather than classroom education (Conant, 2008). Conant (2008) addressed several critical questions, including whether managers view their experience as more important than

classroom education and training for acquiring skills and knowledge. He found that 80% of managers considered their experience a significant contributor to their knowledge and skills. However, fewer than 30% of the managers rated classroom education highly effective (Conant, 2008). Thus, experience wins easily over classroom education. Although classroom education can sometimes precede and supplement experience, these choices are exclusive.

The federal government's Pathways Program aims to assist students and recent graduates in finding federal employment opportunities in a structured manner (Keep & Brown, 2018). Cordonier (2021) examined the relationship between federal agencies and millennial recruitment and retention to determine if these agencies were promoting the Pathways Program and measuring the motivation of millennials to work for the government. Cordonier collected data from FY2013 to FY2019; two datasets were provided by the OPM and one by the Department of Veterans Affairs (VA). The two data sets provided by OPM were FedScope, which includes demographic information about employees, and government-wide management reports that feature findings from the Federal Employee Viewpoint Survey, a yearly survey conducted by the federal government.

Millennials

Understanding the motivational drivers of millennials is critical for the federal government as it seeks to attract and retain a workforce capable of meeting contemporary challenges and expectations. Millennials are motivated by a combination of extrinsic and intrinsic rewards; meaningful work, career development and training, and work-life balance are imperative (Cordonier, 2021; *Federal Workforce*, 2016; Mihelic & Aleksic, 2017; Morrell & Abston, 2019; Zaharee et al., 2018). The federal government needs to recruit millennials to maintain a competitive workforce (Cordonier, 2021). Starting salaries and flexible work

schedules are essential to millennials' preferences. It is also vital to consider public service motivation, the desire to contribute to the public good (Christensen & Wright, 2011). According to Cordonier (2021), public service motivation is a significant motivator for millennials to serve in the public sector.

From FY2013 to FY2019, however, more than 60% of the federal government's workforce was classified as millennials (Cordonier, 2021). Furthermore, based on the OMB's (2020) projections, approximately 30% of federal employees are over 55, and 7% are under 55. Also, between FY2013 and FY2019, the Pathways Program represented less than 1% of the federal workforce, according to Cordonier (2021). Therefore, the number of millennials and Pathways Program workers in the federal government had no statistical significance (Cordonier, 2021). However, four control variables did have statistical significance in the study: (a) average salary, (b) satisfaction with work-life balance, (c) employee separations, and (d) presidential administration (Cordonier, 2021).

Generation Z

Generation Z, born from 1997 onward, possesses characteristics that make federal government work appealing, although individual experiences and motivations can differ. Public service motivation is critical for a socially conscious generation looking to make an impact (Mawhinney & Betts, n.d.). Tech-savvy workers may also be drawn to federal agencies that use advanced technology in cybersecurity or data analysis. Generation Z values flexibility, work-life balance, and opportunities for personal and professional growth, so federal roles offering these aspects can attract them. Nevertheless, the slow pace of government work and lower pay compared to the private sector could deter Generation Z (Mawhinney & Betts, n.d.). To address

these challenges, the federal government could improve hiring processes, highlight public service benefits, and emphasize the nonmonetary advantages of federal jobs.

The U.S. federal government is grappling with an aging workforce, with two-thirds of its employees either over 55 or approaching retirement eligibility, prompting a necessity to recruit younger, diverse talent (Zaleski, 2023). The significant decrease in the number of interns within federal agencies over a decade, from 60,000 to 4,000, has exacerbated the issue; only 8% of the workforce is under 30 (Zaleski, 2023). Efforts to counteract this trend included Executive Order No. 14035 (2021), which permitted paid internships and a budget mandate for 2023 requiring federal agencies to create over 35,000 intern opportunities.

The revitalization of the federal Pathways Program, encompassing various internships and graduate schemes, is a central element in this recruitment strategy. The VA has implemented strategies to appeal to younger individuals, such as organizing job fairs and offering attractive financial incentives (Zaleski, 2023). Despite these endeavors, the federal government faces a high attrition rate, particularly among under-30 entry-level employees, and needs to increase its investment in this demographic. Moreover, competitive salary concerns must be addressed, especially in information technology and cybersecurity roles competing with the tech industry. While progress is being made in attracting and recruiting younger employees, retaining them remains a significant challenge, highlighting the need for greater investment in this segment of the workforce (Zaleski, 2023).

Internship Guidelines

The internship remains at the top of comprehensive pedagogy and andragogy for a particular profession or field (Benavides et al., 2013). A public sector internship was proposed as an experiential learning method for precareer students wishing to pursue a public sector career

(Benavides et al., 2013). Years of trial and error indicate that internships offer students the best chance to learn about the government's inner workings. The degree of experience provided for the adult learner is viewed as much better to classroom learning. Internships have given public administration professionals multiple opportunities to develop students academically and provide practical, professional public service experience. Benavides et al. (2013) identified specific factors that contribute to successful internships, including the following:

- a specific duration and time for an internship;
- an academic component that bridges experiential learning back to academia;
- a placement component to help students obtain internships;
- adequate supervision by both the host agency and the master of public administration degree program, generally by internship coordinators or faculty members;
- compensation or a stipend for the intern; and
- evaluation to obtain feedback from the intern, the host agency, and the institution.

The internship guidelines are valuable for starting or strengthening an internship program. For example, the Network of Schools of Public Policy, Affairs, and Administration (NASPAA) Committee on Public Service Internships has developed a set of Public Service Internship Guidelines (Benavides et al., 2013). Also, the NASPAA Urban Management Education Committee has adopted a model internship guideline for graduate education by the International City/County Management Association Advisory Board. In the public sector and NASPAA-accredited programs, internships have evolved from recruitment tools for governments to an indispensable educational pedagogy for students, universities, and host agencies (Benavides et al., 2013).

The development of internship guidelines by bodies like NASPAA and the adoption of the International City/County Management Association's model for graduate education have highlighted the transformation of internships from mere recruitment tools to key educational strategies in public service. This evolution aligns with Executive Order No. 13562 (2011), signed by President Obama, which introduced Pathways Programs to simplify the federal hiring process for students and recent graduates. These initiatives collectively represent a strategic effort to blend academic learning with practical experience, aiming to build a skilled workforce by making federal employment more accessible and preparing a new generation for public service challenges.

Timeline of Educational Pathway Programs

Executive Order No. 13562

President Obama emphasized the complex hiring process for federal civil service employees and the preference for experienced personnel when he signed Executive Order No. 13562 (2011). The executive order was intended to correct this deficiency by creating pathways for students and recent graduates seeking federal employment, resulting in mentoring and training programs to assist in recruiting millennials (Exec. Order No. 13562, 2011).

Pathways Program

The Pathways Program aimed to provide students or recent graduates with a clear pathway to lessen their challenges when applying for federal employment. The U.S. workforce anticipates a growing demand for workers with advanced skills; therefore, pursuing advanced education is essential to economic and social policy (Keep & Brown, 2018). The Pathways Program currently offers three subprograms:

- an internship program

- a Recent Graduate Program for people who have completed a qualifying educational program within the preceding 2 years
- the PMF Program, for those who obtained a graduate or professional degree within the preceding 2 years

Each program supports college-educated individuals on their path to federal employment as interns or full-time employees. In addition to master of public administration degree program coordinators, the OPM structured a program to benefit recent graduates and feature an internship component (Benavides et al., 2013). NASPAA's and others' task is to ensure federal agencies design and implement vital internships and recent graduate programs.

Benavides et al. (2013) examined how for-credit public affairs and public administration school internships have developed experiential knowledge, illustrating the interdependence between students, their universities, and nonprofit agencies that host interns. Using the model, students can better understand the complex activities and collaborations necessary to create a successful internship program. Survey data from department chairs of NASPAA-accredited programs in 2010 confirmed the processes described in the model sections (Benavides et al., 2013). Experiential knowledge was examined to provide students with for-credit internships. Benavides et al. (2013) described the interdependence between students, their universities, government agencies, and nonprofit organizations that host interns.

Public service education has been undergoing significant changes shaped by various factors. These include challenges to democratic governance, the emergence of cross-sector governance, technological progress, globalization, and changing demographics (J. H. Knott, 2013). To keep up with these changes, NASPAA must evolve from a small organization primarily focusing on curriculum and accreditation to a professional and trade association

representing public policy, administration, and public affairs. NASPAA should expand its external reach, encourage cross-school and program learning, address the diversity of member schools, prioritize competitive areas, and support international initiatives. J. H. Knott (2013) found that NASPAA was moving in the right direction, but there was room for further improvement in the areas mentioned earlier.

Steinberg (2012) explored the decrease in interest in government service and provided several reasons for it. These included unappealing entry-level jobs, limited chances for professional growth and advancement, lower salaries than those in private-sector jobs, and a negative perception of government service. Steinberg proposed solutions like the Pathways Program, loan forgiveness programs, and recognition of public servants to address the labor shortage. However, Steinberg emphasized that changing the public's perception and valuing government service were also crucial.

Federal agencies must provide training, mentorships, and career development to promote participants' development (Excepted Service, Career and Career-Conditional Employment and Pathways Programs, 2012). The Pathways Program replaced the Student Career Experience Program and Student Temporary Employment Program. As part of the Pathways Program, students may explore federal careers and be compensated. It is aimed at students from high school to graduate school in various educational institutions. The OPM (n.d., para. 22) maintained,

Internship programs are essential to addressing these issues. By exposing students and recent graduates to jobs in the Federal civil service at the beginning of their careers, we will engage them at the outset of their work lives, before their career paths are fully established, inform them about the wide variety of interesting opportunities available in

the Federal Government, and break through commonly held stereotypes about “government work.”

As part of its 2011 diversity initiative, the Department of Homeland Security (DHS) headquarters established the Office of Academic Engagement (OAE), through which academic institutions are connected to DHS headquarters via the Pathways Program (DHS, 2023). Through academic partnerships, universities collaborate with DHS on internships, externships for academic credit, and careers as federal employees (DHS, 2022a). In addition, per DHS (2022a), 23 memorandums of understanding (MOUs) addressing diversity have been finalized to cover 15 states and Washington, DC. Further, the OAE has other responsibilities, including outreach and campus resilience. Many partnerships have been established between the outreach office and academic institutions that provide homeland security programs and the campus resilience program, which provides resources to academic communities in response to national threats and hazards. Table 4 represents the Pathways Program data for FY2021, according to the OPM (2022). Included in Table 4 are the percentages of employees in different programs within the federal workforce. The data indicate that most employees (99.59%) are in the All other category, which encompasses regular full-time, part-time, and seasonal employees. The other programs—intern, recent grad, and PMF—have much smaller percentages, with intern and recent grad having slightly higher percentages than the PMF. The other programs cater to specific types of employment, such as internships or recent graduates.

Table 4*Pathways Program Data: FY2021*

Program	%
All other	99.59
Intern	0.21
Recent grad	0.18
Presidential Management Fellow	0.03

Note. Adapted from *Government-Wide DEIA: Our Progress and Path Forward to Building a Better Workforce for the American People: Annual Report 2022* (p. 8), by the U.S. Office of Personnel Management, 2022 (<https://www.opm.gov/policy-data-oversight/diversity-equity-inclusion-and-accessibility/reports/DEIA-Annual-Report-2022.pdf>). In the public domain.

The OPM (2022) is continuously improving its demographic data reporting. As a response to Executive Order No. 14035 and the emerging requirements of agencies in implementing their strategic plans, the OPM aimed to enhance its reporting capabilities to address these needs. One such anticipated change is the addition of more gender categories to encompass people of all gender identities. Moreover, the OPM has begun exploring ways to provide more data on underserved communities, as specified in Executive Order No. 14035, to identify gaps and community needs, thereby devising more effective strategies to engage these communities (OPM, 2022).

DHS (2022a) initiated research and policy initiatives with school administrators, professors, and trainees to maintain and establish relationships with academic community members. DHS has started various research projects and increased its efforts to connect with academic organizations through the OAE. The OAE aims to improve and strengthen

relationships with academic institutions and concentrates on several criteria, including (a) recruiting students and graduates, (b) campus safety and resilience, (c) cybersecurity, (d) international students, (e) infrastructure, and (f) law enforcement and emergency response.

OAE Policy Recommendations

The OAE initiated a program in 2021 titled Come to U.S. DHS, which aimed to engage academic institutions in establishing MOUs with the DHS to address the significant gaps in federal employment (DHS, 2023). Executive Director Tracy Silas, who led the public sector initiative, has showcased leadership qualities that encompass the three groups identified by Van Wart and Dicke (2008): (a) personal characteristics, values, and behaviors; (b) the capacity to influence action and motivation through situational contexts and follower characteristics; and (c) followers' acceptance of leadership. Silas is responsible for establishing MOUs with academic institutions across the United States. Silas has shown interest in acquiring more data from the 23 academic institutions with active MOUs with the DHS, recognizing the opportunity for deeper insights. The data Silas seeks could be instrumental in evaluating the success of these partnerships and guiding future efforts in public sector workforce development.

It is important to note that as of May 2023, data has been collected from the 23 academic institutions that have established MOUs with the DHS (DHS, 2023). Currently, no annual survey is being conducted to assess stakeholder satisfaction or the effectiveness of the MOU with the DHS OAE. By conducting this study, I aimed to gather data regarding the effectiveness of the OAE Come to U.S. DHS program. The collected data provide valuable insights into how the program could positively impact the workforce and the participating academic institutions with MOU agreements.

Conclusion

In summary, I provided in Chapter 2 of this dissertation some background information on U.S. government policies and programs. The U.S. government has exhibited a robust commitment to cultivating the future workforce through the Federal Internship Improvement Act and the creation of the OAE. In addition, by fostering academic collaborations and implementing initiatives like the Pathways Program, the federal government has sought to close the employment gap, encourage diversity, and establish a highly educated workforce within the public sector. Through a focus on practical learning experiences and strengthening relationships with academic institutions, the DHS academic partnership has played a vital role in ensuring a competent and diverse workforce to address the nation's evolving security challenges.

Chapter 3: Methodology

I herein outline the research methodology for studying perceptions and contributions of academic institutions with a signed MOU with the DHS between 2021 and 2022. Creswell (2013) defined *research methodology* as the foundational and theoretical perspectives that shape research methods, approaches, and designs, suggesting that a theoretical framework is an integral part of the broader research methodology that should guide, frame, and explain the entire research study. Somekh and Lewin (2005, p. 346) argued that research methodology involves “the collection of methods or rules by which a particular piece of research is undertaken” as well as the “principles, theories, and values that underpin a particular research approach,” adding a layer of complexity to the concept. Meanwhile, Mackenzie and Knipe (2006, p. 5) differentiated research methodology as the overarching approach to research linked to the paradigm or theoretical framework, whereas *method* pertains to the systematic modes, procedures, or tools used for collecting and analyzing data, emphasizing the need for a comprehensive and multidimensional understanding of research methodology.

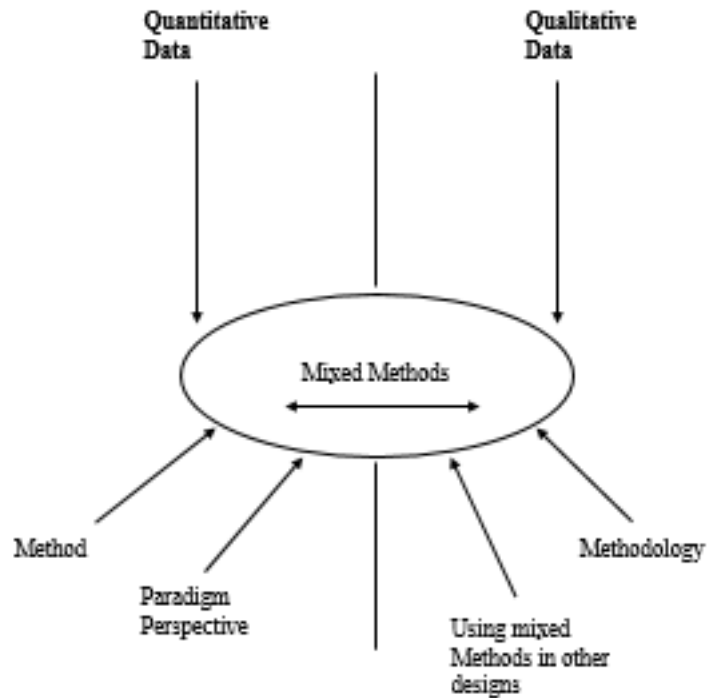
Research Design

The study used an explanatory sequential design, comprehensively exploring the posed research questions through broad and in-depth analyses. I gathered data from administrators connected to the MOU at the collaborating educational institution. The explanatory sequential design was deliberately chosen to leverage the quantitative data and the depth of understanding afforded by qualitative insights, a strategy supported by Creswell and Creswell (2022).

My research used qualitative methods to explore areas that needed to be better understood, such as personal experiences and institutional nuances that could affect the implementation of the MOU (Creswell & Creswell, 2022). The participants were carefully

chosen based on their direct involvement with the MOU, so they provided authentic and relevant insights, which ensured that the findings reflected the realities of policy and practice within the partner educational institution. I used a combination of a semistructured interview and an analysis of MOU documents to gather data. These data allowed me to cross-check the findings and improve the study's accuracy (Creswell & Creswell, 2022). The data integration process followed an explanatory sequential design in which the quantitative results were compared to the qualitative narratives. By doing so, I could identify similarities and differences between the two data types, offering a comprehensive understanding of the subject, as described by Creswell and Creswell (2022).

The rationale for choosing a mixed methods approach in this dissertation centered on thoroughly examining the DHS academic engagement program's impact on the academic community. The study addressed the factors influencing faculty and administrator engagement within the MOU at the collaborating educational institution. The mixed methods design was selected for its comprehensive capability to combine qualitative depth with quantitative breadth, as demonstrated in Figure 1.

Figure 1*The Essence of Mixed Methods Research*

Note. From “Mapping the Developing Landscape of Mixed Methods Research,” by J. Creswell, in A. Tashakkori & C. Teddie (Eds.), *Handbook of Mixed Methods in Social & Behavioral Research* (2nd ed., p. 51), 2010, Sage. Copyright 2010 by Sage Publications.

The justification for this design is multifaceted.

- The goals and research questions previously outlined called for a combination of qualitative and quantitative research techniques.
- The dissertation required an intricate examination of the dynamics of trust and decision-making processes within the academic sector, necessitating both qualitative insight and quantitative validation.

- There is a recognized gap in the existing body of research concerning the roles of trust constructs and decision-making within academic collaborations. A mixed methods approach was poised to fill this gap by providing a layered understanding of these factors.

In leveraging the strengths of the mixed methods design, I conducted semistructured, in-depth interviews to garner detailed perspectives on trust and collaboration within the academic sector. Phase 1 of the study prioritized a quantitative approach to establish and refine the interconnections among the identified variables. The insights obtained from this phase were then used to shape a theoretical framework for Phase 2, which was focused on collecting qualitative data to capture rich, detailed narratives enlightening individual trust factors and motivations for engaging with the DHS academic engagement program. An expansive discussion of both phases is presented later in this chapter.

Overview and Significance of Mixed Methods Design

As Creswell (2013, p. 2) defined, mixed methods research is a multifaceted approach applied in the social, behavioral, and health sciences. This methodology involves collecting quantitative and qualitative data, synthesizing them, and drawing conclusions that leverage the collective merits of both data types to unravel complex research questions. Not all combinations of quantitative and qualitative data constitute a mixed methods approach. To be classified as such, integrating these data sets must be underpinned by a structured scientific technique, a mixed model strategy, or an advanced evaluation method (Creswell, 2013). Excluding the simpler forms of data amalgamation, Creswell identified critical elements of an accurate mixed methods study as

1. the acquisition and analysis of quantitative and qualitative data addressing research queries;
2. the application of stringent methods for both qualitative and quantitative research;
3. the merger or assimilation of data using a distinct mixed methods design, alongside the interpretation of this confluence; and
4. occasionally, the contextualization of the design within an overarching philosophical or theoretical framework.

Considering this description and the characteristics outlined, mixed methods research is categorized into one of three primary designs: convergent, explanatory sequential, and exploratory sequential (Creswell, 2013). For this study, explanatory sequential design was used.

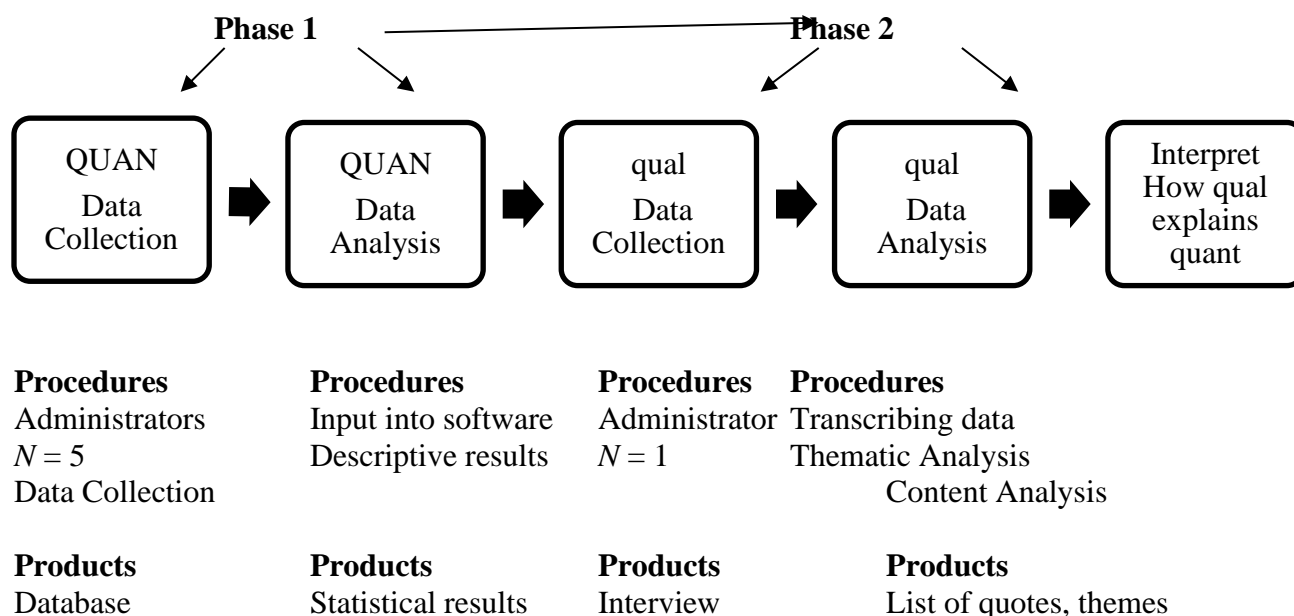
Creswell and Plano Clark (2018) suggested that mixed methods research is appropriate when research problems require answers beyond the scope of quantitative or qualitative data alone due to their complexity. The current study employed a mixed methods approach for data collection and analysis. Quantitative data are essential to understand the DHS OAE diversity program comprehensively. However, relying solely on statistical data might not accurately depict the program's outcomes and perceptions. Therefore, incorporating qualitative data by examining the perspectives and experiences of academic administrators was crucial to developing a more nuanced understanding of the program's impact.

Statistics alone might not be sufficient to understand the perceptions and outcomes of the survey. Therefore, it was crucial to integrate both quantitative and qualitative data to gain a deeper understanding of academic administrators' perceptions and experiences regarding the survey. A mixed methods approach allowed for a more comprehensive investigation into the

survey's effectiveness and influence on fostering diversity, equity, and inclusion within academic institutions.

Explanatory Sequential Design

For this dissertation I selected explanatory sequential design from the various mixed methods approaches due to its alignment with the research questions. This design initiates the collection and analysis of qualitative data to delve into the research issues. Figure 2 depicts the process in the explanatory sequential design suggested by Creswell (2013). Insights derived from this qualitative exploration were then used to formulate new instruments or frameworks for further empirical scrutiny. The subsequent phase transitioned to a quantitative investigation, applying and testing these new instruments or constructs on a larger scale to ascertain if the qualitative findings hold across a wider population. The following section elaborates on a detailed justification for choosing this design and thoroughly delineates the process.

Figure 2*Explanatory Sequential Mixed Methods Design*

Note: Adapted from *A Concise Introduction to Mixed Methods Research* (1st ed., p. 57), by J. W. Creswell, 2015. Sage. Copyright 2015 by Sage Publications.

According to Creswell (2013) and Creswell and Plano Clark (2018), the explanatory sequential mixed methods design is a well-structured framework that can be used to investigate the complex relationship between academic institutions and the DHS. This design employed a two-phase approach that begins with collecting and analyzing quantitative data through structured surveys to understand the extent of engagement between the institutions and the DHS (Creswell, 2013). The second phase is the qualitative phase that enriches the quantitative findings with thematic analysis, providing deeper insights into the nuances of the partnership, such as the motivations, challenges, and perceived benefits (Creswell, 2013; Lincoln & Guba, 1985).

This approach involves two phases to ensure a comprehensive analysis of the data. The first quantitative phase involves gathering statistical information through surveys, experiments, or examining existing datasets (Creswell & Plano Clark, 2018). The second phase builds on the results of the first phase and uses qualitative methods such as interviews, focus groups, observations, or document reviews to provide more depth and context (Creswell & Plano Clark, 2018). The qualitative data obtained in this second phase helps to address potential biases and allows for a more in-depth exploration of individual perspectives (Fowler, 2014; Groves, 2006).

Integrating quantitative and qualitative data is crucial to this design as it helps researchers draw comprehensive conclusions. By comparing results or directly linking qualitative findings to quantitative data, researchers can provide solid explanations for the phenomenon under study. This method is particularly valuable when quantitative data alone may not be sufficient to elucidate the complexities of the subject matter. Creswell and Plano Clark (2018) emphasized the importance of this approach, enabling researchers to obtain a more nuanced understanding of their research topic.

This design helps better understand the research topic and improves the study's credibility by cross-checking the findings and strengthening the outcomes. This integrative process is called explanatory sequential design, and it is instrumental in mixed methods research where a multidimensional analysis is necessary to capture the dynamics in play.

Population

This research study aimed to understand the perceptions and contributions of academic institutions with a signed MOU with the DHS between 2021 and 2022. The population targeted for this study included 23 academic institutions across the United States, comprising state and private nonprofit institutions. According to Creswell (2013), research design involves initial

exploratory data analysis and quantitative exploration, followed by a qualitative phase based on the findings. A primary objective of the strategy is to develop better measurement methods with specific samples of populations and to determine if data collected from a few individuals can be generalized to a larger group of individuals. A quantitative data and analysis phase is used in the explanatory design, followed by a qualitative phase based on the findings.

Purposive Sampling

The study used purposive sampling, a nonprobability sampling method, to select participants. The number of academic institutions may have changed with more MOUs established after 2022. However, for this study, the 23 academic institutions were identified to provide additional data due to their established partnerships. Creswell (2013) suggested being purposeful in identifying participants who might provide insight into the research question. Purposeful sampling involves selecting participants because they might contribute something to the analysis. In the first phase of the study, criterion sampling (a method where all participants meet a predetermined criterion) was employed to gather data. In the second phase, snowball sampling was used, which involves identifying valuable cases through referrals from individuals who know others fitting the study's requirements and can provide rich information. The number of academic institutions may have changed with more MOUs established after 2022. However, for this study, the 23 academic institutions are listed in the order in which their MOUs were established.

1. University of Louisville
2. University of Oregon
3. Arizona State University
4. Wilberforce University

5. Ohio State University
6. Southern University Law Center
7. Eastern Michigan University
8. University of Nebraska
9. Southern University New Orleans
10. Texas Southern University
11. Hispanic Association of Colleges and Universities
12. Tougaloo College
13. Jackson State University
14. Howard University
15. Keiser University
16. Benedict College
17. Trinity Washington University
18. Wesleyan College
19. Navajo Technical University
20. University of the District of Columbia
21. Mississippi Valley State University
22. University of Guam
23. Bennett College

It was necessary to explore the opinions of participating academic institutions participating in the MOU with the OAE since these institutions facilitated internships for students who have completed the Pathways Program and aided in filling the workforce gap with much-needed positions.

The sequential explanatory mixed methods approach comprised two phases of data collection. The sequence included a quantitative and a qualitative phase. The following section elaborates on the type of data collected in both phases, the procedures followed for data collection, and the instruments employed in the process.

Inclusion Criteria and Exclusion Criteria

This study's inclusion and exclusion criteria ensured that the research focused on the perceptions and contributions of academic institutions directly engaged with the DHS through MOUs between 2021 and 2022. By concentrating on these specific institutions and participants, the study aimed to capture the most relevant and accurate data on how the MOUs have affected and influenced the affiliated academic institutions.

Inclusion Criteria

- Academic institutions that had signed an MOU with DHS between 2021 and 2022.
- Participants were faculty or administrators directly involved in the MOU and its implementation within the affiliated academic institution.
- Both state and private nonprofit academic institutions in the United States were eligible for inclusion.
- Academic institutions with MOUs focused on various research areas and disciplines were included to ensure diverse perspectives were considered.

Exclusion Criteria

- Academic institutions did not have MOUs with the DHS or had signed MOUs outside the 2021–2022 timeframe.
- Faculty or administrators were not directly involved in the MOU or its implementation at their respective academic institutions.

- Academic institutions were located outside the United States.
- Institutions had a for-profit status or were not primarily focused on academics.

Instrument

According to Fowler (2014), the survey instrument must follow specific rules to avoid confusion during the survey and choose one response. Questions are lowercase: how many years have you worked there? These methods will ensure smoother and more efficient surveys. It is essential to assess the needs and interests of the audience before reporting the results of a mixed methods evaluation. In addition, organizing and consolidating the final report and formulating sound conclusions are essential. Researchers must determine the effectiveness of an intervention and provide recommendations for using qualitative and quantitative data. If the intervention is impractical, the qualitative data can explain why it is ineffective and what changes are needed.

Informed Consent

To protect participants' rights and privacy, the online survey for this study included an informed consent form at the beginning (see Appendix A). The informed consent form explained the purpose of the study, the voluntary nature of participation, and the confidentiality measures in place for the data collected. Participants were required to read and agree to the informed consent before completing the survey questions. The survey was designed using Qualtrics software, which facilitates the creation and distribution of online surveys. Moreover, the survey questions and response options were carefully crafted based on the research questions and objectives of the study (see Appendixes B and C).

Participants who declined informed consent or discontinued the survey at any point were taken to a thank-you page, and their responses were not be recorded. The survey was designed so

that only one survey could be taken, to ensure data quality and prevent multiple submissions. As part of the study's ethical protections, these measures protected participants' rights and privacy.

Research Ethics

I implemented rigorous ethical standards to ensure the reliability and validity of the study's findings, as noted in Table 5. The data were collected from multiple sources, including Phase 1 quantitative surveys and Phase 2 semistructured interviews, complemented by my analytical memos. Given my involvement with the MOU, these memos provided critical reflexivity, fostering transparency and introspection. I actively pursued evidence that might contradict preliminary beliefs to counter potential confirmation bias. I invited the interviewees to review their transcripts for accuracy and intent, which confirmed the findings' validity.

The study's credibility was enhanced using varied data sources, such as a semistructured interview, researcher narrative, and surveys, offering a comprehensive view of the MOU's operations. This multifaceted approach ensured the findings were accurate and reflected the participants' perspectives. For transferability, I provided a thorough description of the participants. Such rich, descriptive narratives, including direct quotes and situational contexts, enable the application of the study's findings to other settings, as readers can better gauge the relevance to their own contexts. Dependability was established through the maintenance of an audit trail and the conduct of an inquiry audit.

The research process was meticulously documented, detailing any changes made during the study. This documentation allowed for the study's findings to be verified and the research replicated, demonstrating consistency over time. Lastly, the study's confirmability was ensured through my engagement in reflexivity and the implementation of member checks. Reflexivity involved examining my biases and how they might influence the research. Member checks

allowed participants to review the interview content to ensure that the conclusions drawn were firmly based on their experiences, thereby affirming that the study's findings were a result of the participants' perspectives rather than my biases.

Table 5

Maintenance of Research Ethics

Component	Description	Strategy	Evidence in study
Credibility	Ensures that the findings of the research are accurate from the perspectives of the participants	Multiple sources of data	Semistructured interviews, researcher narrative, surveys Use of multiple data sources such as interviews, surveys, and document analysis
Transferability	Indicates that the findings are applicable in contexts outside of the study	Thick description of the research context Providing information of participants Detailed description of the research process	Descriptive narratives of the setting and participants Inclusion of direct quotes and situational contexts
Dependability	Demonstrates that the research findings are consistent and could be repeated	Audit trail Inquiry audit	Documentation of the research process and any changes Review by an external auditor of the processes and findings Detailed methodological description to enable replication
Confirmability	Affirms that the findings are the result of the experiences and ideas of the participants rather than researcher bias	Reflexivity Member checks	Allow interview participant to read interview questions and transcripts to clarify research interpretations

Limitations

This study faced limitations in generalizability, sampling methods, and the reliability and validity of its findings. Additionally, using mixed methods poses challenges in integrating qualitative and quantitative data, and time and resource constraints may have affected the study's thoroughness. Focusing solely on 23 academic institutions with an MOU with the DHS from 2021 to 2022 restricted the findings' relevance to other institutions or time periods. Consequently, the results may not accurately reflect the experiences of academic institutions without an MOU or those engaging with the DHS outside the studied timeframe.

Due to time and resource constraints, the study did not include all relevant stakeholders, such as DHS representatives or faculty and administrative members involved in the partnerships, resulting in an incomplete understanding of the perceptions and contributions of the academic institutions. By acknowledging these limitations and employing the suggested mitigation strategies, the study's credibility is enhanced, contributing to a better understanding of the perceptions and contributions of academic institutions in their partnerships with the DHS.

Data Collection

The data collection process involved a structured survey targeting a representative from each of the 23 academic institutions participating. For those who consented to the follow-up survey, a set of carefully crafted questions was used to gather qualitative data. Following data collection, a thematic analysis scrutinized the responses (Braun & Clarke, 2006; Creswell, 2013; see Appendix C).

A structured survey is an invaluable tool in research, enabling researchers to probe into participants' perspectives and experiences with flexibility during data gathering. The wealth of intricate data amassed from open-ended responses offers precious insights into the research

subject (Creswell, 2013). Thematic analysis, as suggested by Braun and Clarke (2006), is a reliable technique for qualitative data interpretation, where patterns or themes are identified, examined, and interpreted. The process encompasses several steps, from familiarizing oneself with the data to generating initial codes and searching, reviewing, defining, and naming themes. This method's flexibility and accessibility make it suitable for diverse research themes and contexts, further enhancing its utility in the study (Braun & Clarke, 2006).

Surveys and questionnaires are practical methods for gathering data from a sample population across diverse geographic regions (Creswell & Guetterman, 2019). Quantitative data was collected through 20 closed-ended survey questions (see Appendix B). RQ2 explores how academic institutions measure the recruitment of current students and recent graduates to support diverse workforce initiatives and how these metrics differ based on institutional size, type, and location. This question was crucial for understanding universities' contributions to promoting workforce diversity. RQ2 necessitated a quantitative data analysis method, specifically descriptive. The research question required me to gather numerical data such as the number of recruited students; the type of diversity initiative; and institutional size, type, and location.

Phase 1 Survey Recruitment

I emailed the publicly available designated points of contact (POCs) noted on all MOUs for the 23 academic institutions with active MOUs with the DHS, using email recruitment message approved by the institutional review board (IRB). A follow-up wave of emails was dispatched 1 week after the initial contact. Upon contacting the POCs as stipulated in the MOUs, I inquired about their willingness to engage in the study. When participation was declined, alternative POCs affiliated with the MOUs were approached. I thanked those POCs who were unavailable or uninterested for their time.

Conversely, for POCs consenting to participate, I provided details regarding the survey and offered to resend the invitation to accommodate cases where the initial email might have been filtered as spam. For those expressing interest in the qualitative segment of the study, I verbally communicated the recruitment email content and the consent form. No financial incentives were offered for participation in the study.

Phase 2 Phone Recruitment

Phase 2 of this explanatory sequential mixed methods study involved collecting qualitative data. I conducted one semistructured interview (Ayres, 2008; Galletta, 2013) to delve deeper into the findings of the quantitative results (Creswell, 2013). The participants who indicated an interest in participating in an interview during the qualitative data collection phase were purposefully chosen based on their responses to the question. The semistructured interview was conducted once it was scheduled with the participant. Before the interview, the participants and I reviewed the informed consent aloud, enabling participants to ask questions. I performed a semistructured interview using the interview methodology once the individual indicated readiness to begin (Ayres, 2008; Galletta, 2013). I initiated phone calls to the designated POCs using the IRB-approved telephone recruitment script. These POCs were identified using open-source information on their respective academic institution's website. Where necessary, additional contact details were sourced from the institutions' directories using email or name searches. The POCs were approached by telephone to discuss their potential involvement in the study and gauge their readiness to participate. If a POC refused, I sought referrals to other MOU-affiliated POCs who might be interested. For POCs amenable to participating, I orally presented the telephone recruitment script and the consent form, outlining the steps and seeking consent from those agreeing to partake in the subsequent interview phase. No financial incentives were

offered for participation in the study. I asked questions based on the research objectives and the quantitative survey results. The participants were encouraged to express their views honestly to obtain genuine responses (Vaughn et al., 1996). After collecting the data, the study proceeded to the data analysis stage.

Data Analysis

The data analysis and results were discussed in two main phases: Phase I, quantitative, and Phase II, qualitative. According to Lincoln and Guba (1985), thoroughness and credibility play a pivotal role in qualitative research, necessitating communicated findings rooted in logical processes. Lincoln and Guba emphasized the need to shift from description to interpretation in the analytical process, thereby understanding patterns' significance and broader meanings and implications. In addition, they advocated for peer debriefing and researcher triangulation, essential components in fortifying the credibility of the findings. Lincoln and Guba reminded researchers to avoid finalizing themes before all data undergo rigorous analysis and scrutiny.

The semistructured survey, aiming to collect qualitative data, received thematic analysis, as Creswell (2013) suggested; Lincoln and Guba (1985) further endorsed its effectiveness in identifying and analyzing data patterns. Thematic analysis systematically categorized the data, allowing a comprehensive examination of academic institutions' perceptions and contributions in partnership with the DHS. This thematic analysis revealed nuanced insights into the roles and contributions of these institutions within the collaboration, which is essential for understanding the partnership dynamics between academic institutions and the DHS, highlighting strengths and areas for potential improvement.

However, this study encountered several constraints, including selection bias, due to the intricate network of potential biases. Including only 23 academic institutions in partnership with

DHS may not provide a complete representation of the entire spectrum (Berk, 1983). Researchers may unknowingly favor data supporting their preconceptions and overlook contradictory evidence due to the mixed methods and triangulation design approach, fostering confirmation bias (Nickerson, 1998). Nonresponse bias can emerge if faculty or administrators decline participation, possibly skewing the results (Groves, 2006), especially if the reasons for nonparticipation coincide with the study's focus. Social desirability bias may occur if respondents modify their responses to appear more favorable toward their institution or the DHS (Fisher, 1993). Observer bias, wherein a researcher's personal beliefs and experiences sway the interpretation of data (Armstrong et al., 1997), and sampling bias, which may distort the results if the sample disproportionately represents certain institution types (J. J. Heckman, 1979), could also have potentially impacted the study.

Quantitative Data Analysis

Descriptive statistics can summarize a dataset by calculating central tendencies and dispersion measures such as means, medians, and standard deviations (Trochim, 2006). Quantitative data analysis methods, such as descriptive statistics, summarize numerical data and identify patterns or trends in recruitment metrics across academic institutions (Creswell, 2013). These patterns are vital for decision-making processes and enable institutions to devise effective strategies based on concrete numbers and trends. Following the quantitative phase, qualitative data analysis methods can be employed to explain the data in more depth.

Data collection for this study was meticulously executed using a sophisticated online survey platform, Qualtrics. The multiphase distribution process spanned 2 months, during which respondents were engaged in multiple waves to maximize participation and data richness.

Following this period, I carefully downloaded the dataset in an Excel spreadsheet format conducive to initial data handling and scrutiny.

Upon acquisition, the quantitative data underwent a rigorous cleaning process, where discrepancies and irrelevant responses were removed, ensuring a pristine dataset for subsequent analysis. The variables within the dataset were meticulously coded, facilitating their interpretation and analysis in the Statistical Package for the Social Sciences (SPSS) software. The strategic use of SPSS allowed for a robust statistical examination of the variables, uncovering the key predictors that significantly influenced the outcomes of interest in the study. Descriptive statistics were employed to analyze the data obtained from the surveys. These statistical methods provide a logical, meaningful, and efficient way to summarize and describe the collected research data, facilitating a clearer understanding of its underlying trends and patterns (Healey & Donoghue, 2020).

Qualitative Data Analysis

In this dissertation, qualitative data analysis focused on responses from a semistructured survey involving representatives from 23 academic institutions. This survey was strategically designed to accumulate qualitative data, which then underwent thematic analysis as outlined by Creswell (2013) and Braun and Clarke (2006). This procedure is an in-depth process that uncovers, examines, and interprets recurring patterns or themes within the collected data.

I executed interviews via Microsoft Teams, recording both video and audio components. Initially, I transcribed the audio content and reviewed the video to annotate any physical gestures or facial expressions that might clarify the conveyed meanings. I systematically categorized the recurring themes identified in the interviews using Microsoft Excel. I employed line-by-line open coding techniques to discern themes or codes within the transcriptions. These were then

methodically examined to consolidate them into overarching themes, a process known as axial coding. Subsequently, I explored these themes in depth to address the predefined research queries. According to researchers, the iterative process of coding, theme identification, and data comparison, which often reveals new categories and themes, is an integral aspect of the analytical journey (Charmaz, 2006; Glaser, 1992).

As Creswell (2013) and Braun and Clarke (2006) proposed, this procedure starts with immersing oneself in the data. This immersion helped me grasp the depth and breadth of the responses, which aided in generating initial codes that categorized the data based on its content. The subsequent step involved identifying potential themes by grouping related codes and collating all data associated with each potential theme. These potential themes were then examined against the overall dataset to ascertain whether they form coherent patterns.

The themes were reviewed and refined; I defined and named each theme. This activity involved pinpointing the essence of what each theme captured about the data and determining how the themes interrelated to present a comprehensive data narrative concerning the research questions. Through this thematic analysis approach, an in-depth understanding of the perceptions and contributions of academic institutions in their partnership with the DHS was gleaned. Furthermore, it facilitated a discussion on potential biases that might have been encountered during the study, such as selection, confirmation, nonresponse, social desirability, observer, and sampling biases.

Data integration is a critical component in mixed methods research, offering a pathway to synthesize the strengths of both quantitative and qualitative data (Creswell & Plano Clark, 2018). Creswell and Plano Clark (2018) defined *integration* as the linkage between data collection and analysis methods, providing a comprehensive framework with four distinct ways of linking: (a)

connecting, (b) building, (c) merging, and (d) embedding. In the current study, the approaches of connecting and merging were strategically employed to enhance the depth and breadth of the research.

The first integration technique, connecting, was operationalized through a sequenced sampling strategy. Participants for the qualitative phase (Phase 2) were selected based on insights from the preliminary analysis of quantitative survey data collected during Phase 1 (Creswell & Plano Clark, 2018). This methodological linkage ensured that the qualitative inquiries were informed by and responsive to the patterns emerging from the quantitative data, allowing for a targeted and informed exploration of the phenomena.

Building, the second integration technique in mixed methods research, was implemented as an iterative process of using qualitative data to refine and expound upon the quantitative findings. Specifically, this study used qualitative insights from one interview and open-ended survey responses to expand upon the statistical trends identified in the quantitative data (Creswell & Plano Clark, 2018). This approach gave a more comprehensive understanding of the context and subtleties underlying the numerical patterns. By continually referring to the qualitative data during the analysis of quantitative data, the research could build upon the initial results, adding layers of meaning and ensuring that the interpretations were grounded in lived experiences and real-world complexities.

Merging, the third integration technique, involved comparing quantitative results and qualitative findings to address the research questions. This convergence of data streams was planned to occur at specific junctures within the analysis phase, ensuring that each method contributed equally to the final interpretation (Creswell, 2013). The merged data provided a robust platform for a holistic understanding of the research topic.

As Creswell and Plano Clark (2018) articulated, the deliberate intertwining of the connecting and merging techniques enriched the study's analytical framework and elevated its comprehensiveness, credibility, and robustness. By harnessing the collaborative potential of quantitative and qualitative data, the study's mixed methods design facilitated a multifaceted exploration of the research questions, yielding a more nuanced and complete understanding of the issues under investigation.

Additional Data Collection

Given the limited information I initially obtained, I undertook an online content analysis via Google Search to assess the level of advertising by universities holding academic partnerships with the DHS. The search focused on the keywords *Office of Academic Engagement AND MOU AND DHS*, yielding 230,000 results. To refine these findings, I further specified the search by including the names of the 23 academic institutions with MOUs with DHS (see Table 6 below). These partnerships between DHS and academic institutions underline the importance of integrating educational initiatives with national security objectives, aiming to cultivate a well-prepared workforce equipped to address homeland security challenges.

Table 6*Academic Partnerships Promoted Online*

Partner organization	Date of announcement	Description of partnership
Hispanic Association of Colleges and Universities (HACU)	December 2, 2021	HACU and DHS signed an MOU to collaborate on outreach and recruitment within higher education institutions, aiming to engage with a diverse pool of institutions and students.
The White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity through HBCUs	2023	A document outlined annual plans to increase support and opportunities for HBCUs, enhancing academic engagement in security disciplines.
DHS Office of Partnership and Engagement	March 2022	“Ratification of Office of Partnership and Engagement Memorandums of Understanding” document outlined the formal agreements between DHS and various educational partners for academic engagement initiatives.
Dillard University	July 11, 2022	Announced a partnership with DHS through an MOU to create opportunities for students and recent graduates, focusing on careers in homeland security.
Keiser University	June 8, 2022	Partnered with DHS to contribute to the growth of the nation’s national security workforce, leveraging the university’s resources and expertise.
University of Nebraska Omaha	November 18, 2021	Entered into a partnership with DHS focusing on expanding the homeland security workforce, emphasizing academic contributions to national security efforts.

Note. DHS = U.S. Department of Homeland Security; MOU = memorandum of understanding;

HBCU = Historically Black Colleges and Universities.

Data Storage and Management

According to Creswell (2013), a necessary aspect of research is creating a comprehensive data management plan that outlines the collection, storage, and protection of data during and after the study. The plan should include specific information regarding data accessibility; the

time data will be retained, and the procedure for disposing of the data once the study is completed. The data for this study are saved on a hard drive that is password-protected. Creswell (2013) highlighted the significance of securely storing data to maintain the confidentiality and privacy of participants. A minimum of 3 years is recommended for retaining data after the study to ensure future access or replication. These measures help ensure the study's findings are credible, accurate, and dependable.

Reflexivity

This dissertation was an investigation of the DHS's engagement with academic institutions and reflected the research and methodological journey. Reflexivity, a crucial aspect of qualitative research, connects the researcher's influence with the research process and outcomes. In the following sections, I delve into a reflective analysis of the research role, the challenges faced during the study, and how I overcame barriers.

Initial Research Design and Challenges

At the beginning of this research, I had high hopes and a well-planned strategy to gather data from several institutions associated with the DHS. However, despite two rounds of email communication, only five out of the 23 institutions I approached responded. This response rate was much lower than expected, leading to a critical evaluation of the research approach. It became clear that the approach had to be adapted, resulting in a change to the data collection methodology. With the guidance of the dissertation committee chair, I adopted a more assertive approach. This change highlights the importance of flexibility in research methodologies, particularly when faced with unexpected challenges in data acquisition. The updated approach aimed to improve engagement with potential respondents and increase the chances of gathering sufficient data to meet the study's objectives.

IRB Approval and Continued Adaptation

After shifting the research strategy to conducting interviews, I obtained approval from the IRB to ensure ethical compliance with my revised approach (see Appendix A). Once permission was granted, I pursued interviews with renewed determination. However, the process was not without challenges, as I encountered unresponsive contacts and unanswered calls and often found myself leaving voicemail messages. Despite exhaustive efforts, I was only able to secure two interviews. This research phase taught me an important lesson about the unpredictability of participant engagement and the need to remain flexible and resilient.

Data Collection and Analytical Techniques

Despite having limited interview data, I used a multifaceted approach to collect data. I created detailed spreadsheets to organize the data meticulously, which allowed for a more comprehensive analysis. In addition, I conducted an extensive open-source content analysis to gain a broader perspective on the issue and obtain insights into the public portrayal of the institutions' involvement with the DHS initiative. This adaptive approach compensated for the lack of interview data and enriched the research with various data sources.

Encountering Data Limitations

During the research, a crucial moment occurred when I interacted with the DHS Office of Academic Engagement program overseer. It was revealed that tracking the initiative's progress could have been better monitored due to the many personnel involved. This interaction highlighted the significant limitations in available data, subsequently shifting my research focus. I realized there was a heavy reliance on secondary data sources, highlighting the complexities of evaluating large-scale government initiatives.

Reflecting on the Research Process

Throughout my research journey, I discovered as much about myself as I did about my academic inquiry. With every obstacle encountered and every change in methodology, I was taught a valuable lesson about the dynamic nature of research. These experiences helped me understand the often-overlooked realities of qualitative research, especially when data were not readily available or quantifiable. The process was a continuous balancing act between maintaining methodological rigor and remaining adaptable to different situations.

Personal Growth and Learning

Embarking on this research journey has been a life-changing experience, which has taught me to better understand the intricacies of qualitative research and the significance of adaptability, persistence, and creative problem-solving skills. The obstacles encountered during this journey have sharpened my skills and given valuable insights into the practical aspects of conducting research in complex, real-world situations.

Conclusion

Chapter 3 of the dissertation synthesized the examination of academic institutions' partnerships with the DHS via MOUs from 2021 to 2022. Employing a mixed methods approach, the study shed light on the multifaceted nature of these collaborations. The quantitative phase measured engagement levels, while the qualitative phase provided depth through personal and institutional narratives. I faced hurdles, such as a low response rate, which necessitated methodological flexibility and highlighted the importance of adaptability and reflexivity. Limitations included the nongeneralizability of results due to the purposive sample of 23 institutions and the complexity of evaluating government initiatives. Ethical standards, including informed consent and data protection, were rigorously upheld. The study underscores the

evolving nature of qualitative inquiry within academic–government partnerships and advocates for innovative research methods in future explorations. The methodology’s integral role in the research narrative and the resilience demonstrated throughout the study emphasizes the research process’s value, offering a foundation for future work in the field.

Chapter 4: Findings

I used an explanatory sequential mixed methods design to investigate how the academic sector interacts with DHS initiatives. I aimed to capture and analyze faculty and administrators' views at academic institutions with active MOUs with the DHS. This study aimed to examine the perspectives and contributions of academic institutions that established a MOU with the DHS between 2021 and 2022.

I herein present the findings from the quantitative and qualitative phases of the study to answer the research questions. The first phase reports on quantitative data, which measures the frequency and intensity of the institutions' engagement activities with the DHS and how these vary across different types of academic institutions. Data for this phase were collected through a survey instrument administered to five respondents from 23 academic institutions.

In Phase Two of the study, the research approach transitioned to qualitative analysis, concentrating on the insights obtained from semistructured interviews with one participant. This participant offered detailed narrative responses that illuminated academic administrators' engagement activities and perceptions toward the partnership with the DHS. The findings indicate that the extent of each institution's commitment to DEIA principles significantly shapes administrators' perceptions of the DHS partnership.

Furthermore, the research demonstrates that academic institutions proactively incorporate social equity considerations into their recruitment metrics. This strategic integration aims to support and enhance the initiative for a diverse workforce, specifically targeting current students and recent graduates. Additionally, the study revealed that the variation in equity-focused metrics is influenced by institutional characteristics such as size, type, and geographic location.

Participants and Data

Five participants completed quantitative surveys and one engaged in semistructured qualitative interviews for the study. The research involved six participants, using a mixed methods approach to collect both quantitative and qualitative data. Five participants completed surveys to provide measurable numerical data for statistical analysis to identify patterns or trends within the study population. Meanwhile, one participant underwent a semistructured interview that offered deep insights into experience, opinion, and motivation, enabling a more detailed understanding of the subject matter (see Table 7).

Table 7

Number of Participants in the Study (N = 6)

Method	<i>n</i>
Survey	5
Interviews	1

Findings From Phase 1

Findings for RQ1

RQ1: What are the perceptions of academic administrators regarding the academic partnership with DHS?

Respondents were unanimous in identifying no concerns with the DHS partnership (see Table 8).

Table 8

Concerns with DHS Partnership

Variable	<i>N</i>	%
No	5	100.0
Yes	0	0

In analyzing the accessibility of DHS support as perceived by participants, the data revealed a significant inclination toward the importance of DEIA practices within institutional operations. As depicted in Table 9, a combined total of three out of five participants (60%) viewed the DHS staff as very accessible, two out of five (40%) as very accessible, or one out of five (20%) as extremely accessible.

Table 9

Accessibility of DHS Staff

Variable	<i>N</i>	%
Somewhat accessible	1	20.0
Moderately accessible	1	20.0
Very accessible	2	40.0
Extremely accessible	1	20.0

The responses to the concerns outlined in the study exhibit notable variation. While one respondent viewed the concerns as “probably yes,” three respondents remained uncertain and responded with “might or might not,” and another perceived the concerns as “probably not” (see Table 10).

Table 10

Noted Concerns

Do you perceive noted concerns?	No. of responses
Probably yes	1
Might or might not	3
Probably not	1
Total	5

Findings for RQ2

RQ2: How do academic institutions incorporate social equity considerations in their recruitment metrics for current students and recent graduates to support the diverse workforce initiative?

The survey results reveal a pronounced imbalance in how institutions prioritize social equity. Table 11 illustrates four out of five (80%) institutions did not prioritize social equity within their strategic or operational agendas. In stark contrast, only one out of five (20%) acknowledged social equity as a priority, indicating a significant gap between institutional values and their implementation priorities.

Table 11

Prioritize Social Equity

Variable	<i>N</i>	%
No	4	80.0
Yes	1	20.0

The data indicates four out of the five (80%) of institutions recognized the need to establish specific recruitment metrics to bolster diverse workforce initiatives, yet they lacked such measures. This is reflected in Table 12, which shows that only one out of five (20%) of the surveyed institutions had implemented recruitment metrics that align with diversity objectives.

Table 12

Recruitment Metrics

Variable	<i>N</i>	%
No	4	80.0
Yes	1	20.0

While examining academic institutions engaged in partnerships with the DHS, this study found two out of five (40%) participants considered DEIA practices within institutional operations extremely important, and another two of the five (40%), deemed them very important. Only one out of five (20%), rated it as slightly important, indicating some variability in the perceived urgency of these initiatives, as demonstrated in Table 13.

Table 13

Importance of Diversity, Equity, Inclusion, and Accessibility

Variable	<i>N</i>	%
Extremely important	2	40.0
Very important	2	40.0
Slightly important	1	20.0

The data revealed a notable trend in the prioritization of social equity within institutions of higher learning. Table 14 indicates that the Hispanic-serving institutions (HSIs) surveyed did not prioritize social equity, as evidenced by a lack of affirmative responses in this category. Conversely, within the cohort labeled as Other, one institution acknowledged social equity as a priority. This observation contradicts the presumption that HSIs, which cater to Hispanic and Latino communities, would inherently prioritize social equity. The data from the survey determined that, out of five institutions, only one institution, not classified as an HSI, claimed social equity as a priority.

Table 14*Institutions That Prioritized Social Equity*

Classification of institution	No	Yes	Total
HSI	1	0	1
Other	3	1	4
Total	4	1	5

Note. Table 14 reflects self-reported prioritization of social equity by five surveyed institutions, classified as *HSI* for Hispanic-Serving Institutions and *Other* for all non-HSI institutions.

I analyzed the relationship between perceived importance and accessibility by using cross-tabulation (see Table 14). The defined importance levels were Extremely important, Very important, and Slightly important, and accessibility levels were set from Somewhat accessible to Extremely accessible. The analysis revealed a varied distribution of importance and accessibility levels. Specifically, I found that of the responses labeled Extremely important, participants rated one as Somewhat accessible and another as Extremely accessible. For responses deemed Very important, participants rated one as Moderately accessible and another as Very accessible. Only one response fell into the Slightly important category, which was also Moderately accessible. In sum, except for the Very accessible level, which corresponded to two responses, each accessibility level matched one response. The study included five responses, indicating a trend toward a balance between the ratings of importance and accessibility among the participants, as determined in Table 15.

Table 15

Cross-Tabulation of Level of Importance and Accessibility Levels of DEIA

Level of importance	Somewhat accessible	Moderately accessible	Very accessible	Extremely accessible	Total
Extremely important	1	0	0	1	2
Very important	0	1	1	0	2
Slightly important	0	0	1	0	1
Total	1	1	2	1	5

Note. Each cell in the table represents the responses corresponding to the intersection of the respective importance and accessibility levels. DEIA = diversity, equity, inclusion, and accessibility.

Table 16 shows that four of five academic institutions surveyed (80%) did not prioritize social equity or employ recruitment metrics. In contrast, a single institution affirmed a commitment to social equity and supported this with recruitment metrics.

Table 16

Institutional Prioritization of Social Equity and Recruitment Metrics

Does your institution prioritize social equity	Recruitment metric		Total
	No	Yes	
No	4	0	4
Yes	0	1	1
Total	4	1	5

Findings for RQ3

RQ3: How do equity-focused metrics vary based on institutional size, type, and location?

RQ3 was used to explore the valuation and perceived impact of DEIA initiatives across various academic settings. Table 17 indicates that one private college or university considered DEIA to be Extremely important, two deemed it Very important, and one viewed it as Slightly

important, making a total of four private institutions. On the other hand, one public college rated DEIA as Extremely important; only one public institution was surveyed.

Table 17

Academic Institution and Importance of Diversity, Equity, Inclusion, and Accessibility

Academic institution	Extremely important	Very important	Slightly important	Total
Private college or university	1	2	1	4
Public college	1	0	0	1
Total	2	2	1	5

Table 18 presents a cross-section of the academic landscape, categorizing institutions into three distinct sizes: small institutions with enrollments under 5,000 students; medium institutions with enrollments between 5,000 and 15,000; and large institutions with more than 15,000 students. These categories encompass a range of institution types, including private colleges and universities in urban and suburban settings; public colleges in suburban areas; and HSIs, HBCUs, and tribal colleges or universities (TCUs) in both rural and urban environments.

Table 18

Institution Size, Type, and Location

Size	Type	Location
Small	HIS	Rural
Medium	Public college/university	Suburban
Large	Private college/university	Urban
Large	Other	Urban
Large	Private college/university	Suburban

The findings from the survey suggest a nuanced view of DEIA initiatives across these diverse institutions. HSIs reported a moderate acknowledgment of the importance of DEIA initiatives. In contrast, a group of institutions classified as Other indicated a more substantial commitment, with responses indicating that DEIA initiatives are extremely important or very important. This contrast is shown in Table 19, such that HSIs appear less likely to rate these initiatives as crucial than their Other counterparts.

Table 19

Institutional Type and Valuation of Diversity, Equity, Inclusion, and Accessibility Initiatives

Classification of institution	Extremely important	Very important	Slightly important	Total
HSI	0	0	1	1
Other	2	2	0	4
Total	2	2	1	5

As shown in Table 20, further insights emerged when examining institution types and the importance placed on DEIA. Respondents from private colleges and universities show varied perceptions of the importance of DEIA initiatives, spanning from extremely important to slightly important.

Table 20

Academic Institution Types and the Importance Placed on Diversity, Equity, Inclusion, and Accessibility

Academic institution	Extremely important	Very important	Slightly important	Total
Private college or university	1	2	1	4
Public college	1	0	0	1
Total	2	2	1	5

The perceived effectiveness of these DEIA initiatives in fostering diversity and inclusion is shown in Table 21. This table suggests a disparity in perceptions, with one institution strongly affirming the impact of its programs. In contrast, HSIs and other HBCU and TCU institutions predominantly expressed moderate agreement. Notably, one institution within the Other category strongly disagreed with the effectiveness of its DEIA programs, indicating divergent experiences and perhaps signaling areas where DEIA efforts may require reinforcement or a reevaluation of strategy.

Table 21

Institutional Classification and Perceived Impact on Diversity, Equity, Inclusion, and Accessibility Outcomes

Classification of institution	Strongly agree	Somewhat agree	Strongly disagree	Total
HSIs	0	1	0	1
Other	1	2	1	4
Total	1	3	1	5

My analysis revealed that three out of five academic administrators (60%) exhibited ambivalence toward the DHS partnership. In comparison, one out of the five (20%) viewed it positively and 20% negatively, with none expressing concerns. Furthermore, four out of the five institutions (80%) overlooked social equity in their strategic planning, and an equivalent proportion lacked diversity-focused recruitment metrics despite acknowledging their necessity. Four out of the five participants (80%) rated DEIA practices as very important, yet there is a stark absence of social equity prioritization, especially among HSIs.

Findings From Qualitative Analysis Phase 2

The findings from Phase 2 resulted in seven themes that emerged from qualitative analysis to answer the four research questions.

RQ1: What are the perceptions of academic administrators regarding the academic partnership with DHS?

RQ2: How do academic institutions incorporate social equity considerations in their recruitment metrics for current students and recent graduates to support the diverse workforce initiative?

RQ3: How do these equity-focused metrics vary based on institutional size, type, and location?

RQ4: Which theoretical framework most aptly characterizes the impact of academic partnerships with the DHS in fostering a diverse public sector workforce?

Seven themes emerged from the findings.

1. **Minimal impact of DHS partnership:** This theme represented the institution's evaluation of the efficacy of the partnership with DHS, examining whether expectations were met and benefits received.
2. **Self-reliance of the institution:** This theme addressed the institution's approach to achieving its goals without relying on DHS, emphasizing its independent strategies and capabilities without substantial DHS support.
3. **Symposium success and missed opportunities:** This theme addressed the institution's evaluation of the outcomes of specific collaborative events (like symposia) to identify any unrealized opportunities to leverage the partnership more effectively.

4. Lack of direct impact from DHS: This theme covered the direct effects of the partnership on the institution's practical outcomes, such as student internships and job placements, to determine if the partnership provided any unique advantages.
5. Branding and visibility challenges: This theme addressed the institution's challenges in branding and public recognition significantly beyond its local area as well as the potential for growth through improved branding strategies.
6. Diversity and inclusion initiatives: This theme represented the institution's efforts and commitment to diversity and inclusion within the context of the DHS partnership and to identify any challenges at different levels of institutional hierarchy.
7. Placement and success metrics: This theme addressed how the institution measured its success in student job placements and career readiness, particularly how it aligns these success metrics with or without the influence of the DHS partnership.

The discussion has been structured thoughtfully to align with each research question, resulting in a clear and cohesive presentation of the participant data concerning the identified themes. From the pool of 23 academic institutions approached for this study, only one private nonprofit academic instructor agreed to participate and provided valuable insights through a Microsoft Teams interview that lasted 45 min. To maintain research integrity and foster transparency, the interview questions were shared with the one interviewee before and during the interview.

Qualitative Findings for RQ1

RQ1: What are the perceptions of academic administrators regarding the academic partnership with DHS?

The following themes were identified and collectively outlined the institution's perceived challenges, successes, and strategies in navigating the academic partnership with DHS. The interview transcripts identified seven emergent themes emphasizing self-reliance, workforce diversity, and placement as core focuses.

Theme 1: Minimal Impact of DHS Partnership

The interviewee's statements indicated a clear sentiment that the DHS's role in the partnership has not met expectations, with minimal impact felt by the institution. The academic institution made efforts to align its resources with DHS employment needs: "We have organized and deployed some of our resources to start capturing data in the areas where DHS has indicated they have employment needs." However, the interviewee acknowledged that any significant support or active involvement from DHS is unlikely: "I don't have any expectations that DHS is going to be a supportive part of that."

This theme is relevant to RQ1 as it reflects the interviewee's perception of the DHS's role in the partnership. According to the interviewee, the DHS had not met expectations and had minimal impact on the institution. This disconnect between expectations and reality is crucial in understanding the administrator's perception.

Theme 2: Self-Reliance of the Institution

The institution had taken a stance of self-reliance, with the interviewee affirming their commitment to achieving outcomes independently of DHS support: "I think it's going to be completely on us as an organization if we truly want to see impact or outcomes." This indicates a determination to proceed with their objectives, regardless of the level of engagement from DHS.

The theme of self-reliance demonstrates how the institution responded to DHS's perceived lack of support. Theme 2 also emphasizes a proactive approach to achieving outcomes,

reflecting the administrator's belief that the success of their institution's objectives was independent of the DHS partnership.

Theme 3: Symposium Success and Missed Opportunities

The interviewee reflected on the DHS and university partnership 2023 symposium's success as a point of pride but also recognized that there were additional opportunities to leverage the expertise present for future institutional goals: "I think there's probably still some opportunities to leverage . . . the subject matter experts." Despite this success, the interviewee did not feel DHS contributed significantly to these outcomes. The interviewee acknowledged the symposium's success but highlighted that DHS had made limited contributions.

Theme 4: Lack of Direct Impact from DHS

The interviewee was skeptical regarding the direct impact of DHS on the institution, especially in providing practical benefits such as internships or employment opportunities for students: "I just don't see that DHS per se, the entity of DHS is going to be impactful in any way." The partnership did not afford any special advantages or treatment in these areas. According to the interviewee, there is "no special treatment for their partners who have these MOU arrangements." The skepticism surrounding the direct impact of DHS highlighted the perception that the partnership had yet to result in practical benefits, such as internships or employment opportunities, which are typically expected outcomes.

Theme 5: Branding and Visibility Challenges

The interviewee articulated challenges in branding and visibility, recognizing that the institution's recognition was limited outside its immediate geographical area, which affected its broader initiatives: "One of the biggest challenges that we still have is people really don't know who we are and what we represent." The need to improve the institution's brand message was

emphasized as a significant opportunity for growth and impact: “It’s really that branding message of who we really are and how amazing . . . University and . . . University graduates are.” This theme indicated the administrator’s perception that the institution faced challenges in branding and visibility, which were not alleviated by the partnership with DHS, impacting the institution’s broader initiatives.

Theme 6: Diversity and Inclusion Initiatives

The institution valued diversity and inclusion, and the interviewee believed these qualities were inherent to the institution, thereby naturally supporting DHS initiatives, “So I think by nature of the programs that we offer and our student body that diversity piece is almost already inherent to who we are.” However, the interviewee also noted some challenges in diversity at certain institutional levels: “I think we are a very diverse institution; where it gets a little bit kind of ‘White man’s club’ is at the campus president level.”

Theme 6 reflected the perception that while the institution valued diversity and inclusivity—which align with DHS initiatives—there were challenges at certain institutional levels. This insight into the institution’s internal diversity dynamics related to how the partnership with DHS was viewed regarding supporting or not supporting these values.

Theme 7: Placement and Success Metrics

The interviewee described the institution’s focus on the successful placement of graduates as a key metric of success, setting high expectations for employment outcomes: “As a university president, I am expected to maintain a 90% placement of all of my students when they graduate.” This goal was pursued independently of the level of support from DHS and is seen as a central objective for the institution: “And that’s not . . . only expected of me, but it’s expected throughout the university in making sure that we are placing our students into jobs; actually,

more specifically into careers and not just a job.” By emphasizing placement rates, Theme 7 implied that the institution had clear success metrics that it aimed to achieve independently of DHS support.

The quotes and insights demonstrate how the interviewee’s institution was committed to achieving its goals and took proactive measures to achieve them. At the same time, the interviewee pointed out the perceived shortcomings of the institution’s partnership with DHS. There was a clear understanding of the necessity for self-reliance, an acknowledgment of successes and areas that need improvement, and an honest perspective on the challenges faced by the institution in terms of branding, diversity, and ensuring high job placement rates for its graduates.

Qualitative Findings for RQ2

RQ2: How do academic institutions incorporate social equity considerations in their recruitment metrics for current students and recent graduates to support the diverse workforce initiative?

The second research question was addressed with the help of an interview, aiming to explore how academic institutions incorporate social equity considerations into their recruitment metrics for current students. In this context, the following themes were identified and support RQ2. Two themes emerged from the interview transcripts: diversity and inclusion initiatives and placement and success metrics. These themes provide a multifaceted view of the institution’s approach to integrating social equity into its operational ethos, particularly in student recruitment, as a response to its collaboration with DHS.

Theme 6: Diversity and Inclusion Initiatives

The institution's practices embraced diversity naturally through its existing student body, and the programs offered suggested a recruitment strategy that did not have to go out of its way to ensure diversity—it was already built into the institution's framework:

So I think by nature of the programs that we offer and our student body that diversity piece is almost already inherent to who we are to support the initiatives of the DHS partnership just by nature of who we are.

The institution's approach to education considered students' diverse backgrounds and work experiences to meet their individual needs, aligning with efforts to promote diversity and inclusion in the workforce.

Theme 7: Placement and Success Metrics

The institution's approach to ensuring that students were gainfully employed after graduation, particularly through rigorous placement benchmarks, speaks to the practical application of social equity considerations in recruiting and supporting students and graduates. The interviewee stated, "It really just comes down to placement, right? We have a pretty rigorous placement benchmark. . . . I am expected to maintain a 90% placement of all of my students when they graduate."

Qualitative Findings for RQ3

RQ3: How do these equity-focused metrics vary based on institutional size, type, and location?

The equity-focused metrics examined the differences in how DEIA initiatives are valued, prioritized, and perceived across various types of institutions. To address Research Question 3, which explores how equity-focused metrics vary based on institutional size, type, and location

and their connection to identified themes, we examine the following: the minimal impact of the Department of Homeland Security partnership, the success of the symposium and opportunities that were missed, the lack of direct impact from the Department of Homeland Security, challenges in branding and visibility, initiatives for diversity and inclusion, and the placement and success metrics associated with RQ3.

Theme 1: Minimal Impact of DHS Partnership

This theme speaks to the variation in the impact of external partnerships on different institutions, which may be influenced by size, type, and location. The interviewee affirmed, “I think the impact has been minimal regarding DHS’s participation.”

Theme 3: Symposium Success and Missed Opportunities

The successful execution of a symposium and identifying further opportunities may depend on the institution’s resources, which are tied to its size and type. The interviewee stated, “Think about how long it took us to get the symposium together, right.”

Theme 4: Lack of Direct Impact From DHS

The lack of direct impact may reflect how institutional expectations of partnerships differ based on institutional characteristics like size and type, which affect their ability to leverage such partnerships. The interviewee stated, “I just don’t see that DHS per se, the entity of DHS is going to be impactful in any way.”

Theme 5: Branding and Visibility Challenges

Challenges in branding and visibility can be highly influenced by location, as well as the size of the institution, affecting how equity initiatives are recognized and valued externally. The interviewee asserted, “But I think our biggest challenge is in our branding and our brand message that we don’t convey.”

Theme 6: Diversity and Inclusion Initiatives

The inherent diversity of the institution's programs and student body suggests that institutional type and size can inherently influence the effectiveness and scope of diversity initiatives. The interviewee claimed, "I think by nature of the programs that we offer and our student body that diversity piece is almost already inherent to who we are."

Theme 7: Placement and Success Metrics

The emphasis on placement rates highlighted how the institution's internal measures of success in diversity initiatives could be independent of size, type, and location but still influenced by these factors. The interviewee emphasized, "We have a pretty rigorous replacement benchmark. . . . I am expected to maintain a 90% placement of all my students when they graduate." Each institutional context emphasizes the relevance of RQ3's inquiry into the manifestation of DEIA metrics based on institutional characteristics.

Institutional Size and Type

During the interview, the participant highlighted that their university is better positioned in terms of diversity than other institutions: "My university offers diverse courses, from associate degrees to graduate school programs," indicating a breadth of educational opportunities that contributes to the success of diversity and inclusion efforts. This could be due to the size of the university and the variety of programs it offers. The interviewee pointed out that some institutions, such as HSIs, are too small or too large and may have specific designations. In contrast, the participant's university offers a variety of courses, from associate degrees to graduate school programs. The interviewee also compared the diversity initiatives of their institution with others, stating that the size and type of the institution played a significant role in determining the success of diversity and inclusion efforts.

Location

An institution's location appears to impact the successful execution of diversity and inclusion initiatives. The interviewee remarked, "University caters to the socioeconomic and workforce development needs of the diverse regions it serves," suggesting that the university's single-campus strategy enables it to address the needs of its varied student demographics effectively.

Measuring Success

Regarding how success is measured independently of the DHS partnership, the interviewee stated, "We have a pretty rigorous replacement benchmark and . . . I am expected to maintain a 90% placement of all of my students when they graduate." This indicates that the university has its standards for success, which are not influenced by DHS partnerships or equity-based metrics. The interviewee's emphasis on placement is as a vital metric, indicating that the university uses internal standards to measure its success rather than relying solely on external partnerships or equity-based metrics.

The interviewee revealed that their institution had a comprehensive approach to implementing and assessing the success of equity-focused metrics. Based on the interviewee's insights and the university's reported practices, the institution took a multifaceted approach emphasizing how institutional characteristics shaped its diversity and inclusion initiatives. The university's curriculum was diverse, with associate and graduate-level programs catering to various student demographics. This, coupled with proactive diversity programs, positioned the university favorably compared to other institutions, potentially allowing it to offer more robust diversity programs.

Furthermore, the interviewee explained that the university's strategic location and single-campus policy made it easier to address the socioeconomic and workforce development requirements of the regions it served, thereby impacting the implementation of equity-focused metrics in a practical, localized manner. The university's commitment to its goals and the success of its students was demonstrated by its internal benchmarks, especially its placement rates. The interviewee stressed the importance of maintaining a 90% placement rate for graduates, reflecting the institution's operational ethos prioritizing employment outcomes as a core measure of success.

Overall, the interviewee's insights and their university's strategies suggested that this university employs a holistic and strategic approach to equity-focused metrics. By leveraging its institutional size, type, and location, the university supported and enhanced diversity and inclusion within its student body and extended these principles into the broader community. The university's internal benchmarks for placement rates demonstrated its independent and resolute commitment to student success, affirming that while partnerships with DHS were valued, they were not the sole determinants of the institution's achievements in fostering a diverse workforce.

Summary of Qualitative Findings for RQs 1, 2, and 3

The qualitative findings for RQ1 suggest that academic administrators perceived the partnership with DHS as having minimal impact, with the institution relying on self-driven efforts to align with DHS employment needs. The administrators had low expectations of support from DHS and believed in self-reliance to achieve outcomes. Successes like the DHS partnership symposium were acknowledged, but DHS's limited contribution to these was noted. There was skepticism about the direct impact of DHS on practical benefits such as internships or employment opportunities. The institution also faced challenges in branding and visibility, which

were not mitigated by the partnership with DHS. While the institution valued diversity and inclusion and aligned with DHS initiatives, there were internal challenges at the campus president level. The institution focused on successful graduate placement as a key metric, setting high expectations for employment outcomes that were pursued independently of DHS support.

For RQ2, the institution incorporated social equity considerations into recruitment metrics by naturally embracing diversity within its existing programs and student body. This suggests that recruitment strategies inherently supported diversity, aligning with workforce diversity initiatives. The institution also placed a strong emphasis on placement metrics, aiming for a 90% employment rate for graduates, indicating a practical application of social equity in recruitment and support for students and graduates.

Regarding RQ3, the findings indicated that equity-focused metrics varied based on institutional size, type, and location. The minimal impact of DHS partnerships may have been influenced by these factors. The success of events like symposia and the ability to leverage opportunities can depend on the institution's resources. Branding and visibility challenges, as well as the effectiveness of diversity initiatives, are shaped by institutional characteristics. The interviewee emphasized that despite these variations, the institution maintained high placement benchmarks as a measure of success.

The interviewee also noted that their university was well-positioned in terms of diversity compared to other institutions due to the variety of courses it offered. The university's location allowed it to effectively cater to the socioeconomic and workforce development needs of the regions it served. Success was measured by the institution's own rigorous benchmarks, particularly the placement rate of graduates, which was pursued independently of DHS partnerships or equity-focused metrics.

In summary, the institution committed to goals and proactively measured for achievement, understanding the need for self-reliance and recognizing successes alongside improvement areas. The institution adopted a holistic approach to equity-focused metrics, leveraged characteristic features to support and enhance diversity and inclusion initiatives, and prioritized outcomes related to student employment.

Quantitative Findings for RQ3

Valuation

Findings indicate that private colleges and universities have a range of perceptions regarding the importance of DEIA initiatives, contrasting with the public college's consistent valuation of DEIA as "extremely important." This reflects how institutional type influences the valuation of equity-focused metrics (see Table 22).

Table 22*Academic–DHS Partnership: Diversity & Efficiency Analysis*

Theme	Description
Efficiency	The need for a more interdependent relationship between academic institutions and DHS to maximize resource utilization Concerns about the limited impact of DHS involvement and potential redundancy in efforts
Economy	Misalignment between financial investments and diversity objectives in academic partnerships with DHS Realigning financial strategies to support diversity-focused initiatives
Effectiveness	Mixed perceptions and inconsistent recruitment metrics indicating a need for redefining success measures Establishing clear, quantifiable performance indicators related to diversity recruitment and retention
Equity	Commitment to diversity and inclusion, but not always a strategic priority Integration of equity goals into core strategies of academic institutions Active pursuit and measurement of diversity to ensure fair representation across demographics
Publicity	Lack of visibility and promotion of active MOUs with DHS by academic institutions Only 13% of surveyed institutions actively promoting collaboration with DHS

Note. DHS = U.S. Department of Homeland Security.

Importance

The disparity in perceived effectiveness of DEIA initiatives among institutions, with HSIs, HBCUs, TCUs, and others expressing varying levels of agreement, illustrates how institutional type and possibly size or location affect the perceived importance of these initiatives (see Table 19).

Perceived Impact

The broad recognition of DEIA's importance across institutions of various sizes, types, and locations, coupled with the spectrum of engagement and impact, speaks to RQ3's concern with how these variables influence the outcomes of equity-focused metrics.

Findings for RQ4

RQ4: Which theoretical framework most aptly characterizes the impact of academic partnerships with the DHS in fostering a diverse public sector workforce?

In the context of academic partnerships with the DHS, it is imperative to acknowledge the relevance of the four pillars of public administration (Denhardt & Denhardt, 2015). These pillars—namely efficiency, economy, effectiveness, and equity—are integral to successfully implementing any public policy initiative, including those pertaining to the DHS. In considering RQ4, which seeks to identify the most appropriate theoretical framework for assessing the impact of academic partnerships with the DHS on fostering a diverse public sector workforce, there must be an evaluation of the collaboration against the four pillars of public administration.

Efficiency within these partnerships is crucial, yet the themes of self-reliance and the limited impact of DHS involvement suggest that these partnerships may not maximize their potential. While demonstrating resilience, the institutions' independent initiatives might lead to redundant efforts and overlook the benefits of a synergistic approach with DHS. Therefore, to improve efficiency, there should be a concerted effort to foster a more interdependent relationship that maximizes resource utilization.

The pillar of economy is focused on cost-effectiveness and the strategic use of financial resources. Four of the five or 80% of institutions surveyed in the study did not prioritize social equity, which implies a possible misalignment between financial investments and the objectives of fostering diversity. Realigning financial strategies to support diversity-focused initiatives could ensure that resources are directed toward programs that offer the greatest potential for impacting the workforce composition within the DHS.

Effectiveness is evaluated by how well the partnerships meet their intended goals. The interview findings had a mixed perception, and inconsistent recruitment metrics indicated a need to redefine success measures. Establishing clear, quantifiable performance indicators related to diversity recruitment and retention would provide a more accurate measure of the partnerships' effectiveness.

Lastly, equity is fundamental to these partnerships, aiming for fair representation across all demographics. The qualitative analysis indicates that while there is a commitment to diversity and inclusion, this is not always a strategic priority. Academic institutions must integrate equity goals into their core strategies to address this gap, ensuring that diversity is not only aspired to but actively pursued and measured. Academic partnerships with the DHS should strive for enhanced efficiency through better collaboration, ensure economy by aligning financial strategies with diversity goals, seek effectiveness through clear metrics and goals, and uphold equity as a central strategic priority. Addressing these pillars will lead to a robust and impactful partnership that cultivates a diverse public sector workforce.

A detailed content analysis used a specifically designed spreadsheet to evaluate the visibility and promotion of active MOUs with the DHS. The search parameters, *Office of Academic Engagement* and *MOU* and *DHS* were input into Google, revealing that only three out of 23 identified institutions actively marketed their MOU on their official websites (Dillard University, 2022; Keiser University, 2022; University of Nebraska Omaha, 2021). Additionally, in December 2021, HACU (2021) highlighted its partnership with the OAE. Three other promotional materials—DHS flyers and articles discussing OAE initiatives and MOU ratifications—were found (DHS, 2022b, n.d.-d; White House Initiative on Historically Black Colleges and Universities, 2023). These results indicate a noticeable deficit in publicity efforts,

with only 13% of the surveyed academic institutions actively promoting collaboration with the DHS.

The table 22 captures essential themes of the academic–DHS partnership, spotlighting the efficiency, economy, effectiveness, equity, and publicity of diversity initiatives. The table demonstrates the necessity for a reciprocal relationship between academia and DHS to maximize resource use, underscoring concerns over the limited impact and potential redundancy in DHS initiatives. Often, financial contributions do not match diversity outcomes, calling for a reassessment to channel funds more effectively toward these objectives. The table questions the efficacy of recruitment strategies, with inconsistent metrics signaling the urgency to establish transparent criteria for gauging success in diversity recruitment and retention. Although institutions expressed dedication to diversity, strategic prioritization is frequently lacking, prompting the integration of equity goals into the institutions’ foundational strategies and active monitoring of diversity accomplishments to ensure equitable representation. Lastly, the table reveals the subdued promotion of DHS collaborations, with a scant portion of institutions actively marketing these partnerships.

Analysis of Theoretical Framework

To align with RQ4, the workforce development theory (WDT) is the most apt theoretical framework for characterizing the impact of academic partnerships with the DHS in fostering a diverse public sector workforce. WDT is concerned with aligning educational and training initiatives with the needs of the labor market, which is directly relevant to fostering a diverse workforce. Institutions have diversity initiatives but recognize a gap in executing specific recruitment metrics, suggesting that while the theoretical underpinning of workforce development is acknowledged, its practical application might need enhancement.

WDT could be further leveraged by these institutions through a more intentional integration of diversity into recruitment metrics, thereby closing the execution gap. By doing so, academic institutions could better prepare students for DHS-related careers, targeting diverse populations more effectively and contributing to a more diverse public sector workforce. The alignment of recruitment strategies with diversity initiatives among institutions indicates a focus on workforce development. Yet, four of the five respondents (80%) acknowledged the lack of specific recruitment metrics to support a diverse workforce initiative, which points to an execution gap. This suggests that while a workforce development framework exists, there is room for improvement in measuring and executing it to attract a diverse workforce. Therefore, this theory most closely aligns with RQ4 within the context provided.

Academic institutions recognized WDT's relevance but struggled to translate it into practice, particularly regarding recruiting a diverse workforce. This misalignment is apparent where four of the five (80%) institutions acknowledged the absence of specific recruitment metrics, highlighting a gap between the theory's principles and their execution.

Alignment of Education With Industry Needs

While institutions had diversity initiatives, they lacked recruitment metrics that aligned with the varied needs of the labor market, indicating a misalignment that requires refinement.

Lifelong Learning

The absence of specific metrics in the findings could indicate a potential shortfall in sustaining ongoing educational and career development opportunities.

Inclusivity and Accessibility

WDT's emphasis on inclusivity was recognized in theory but not fully realized in practice, as seen by the gap in executing diversity recruitment metrics.

Collaboration Between Stakeholders

There was no specific mention of how well institutions collaborated with the DHS or other stakeholders in developing a diverse workforce, which could be a potential area for enhancement.

Adaptability and Responsiveness

The absence of specific recruitment metrics implied that institutions may not be fully responsive to the needs of a changing workforce demographic.

In summary, the principles of WDT align with the findings in that while the institutions acknowledged the importance of workforce development in the context of diversity, there was a significant gap in the practical application of these principles. This gap points to an opportunity for institutions to more intentionally integrate WDT principles, particularly inclusivity and alignment with industry needs, into their strategic planning and operational practices.

Integrative Analysis of Quantitative and Qualitative Data: RQ1

Synthesizing the insights, one academic administrator perceived the partnership with DHS as underwhelming regarding direct impact and support. Despite this, they are committed to their institutional goals and values, seeking success through self-reliance and internal efforts. The varied perception reflected a complex relationship with DHS, where the potential for collaboration and mutual benefit existed but was unrealized to the extent the administrator desired.

Integrative Analysis of Quantitative and Qualitative Data: RQ2

In response to RQ2, quantitative and qualitative data synthesis revealed a complex landscape of how academic institutions integrate social equity into their recruitment metrics to support a diverse workforce initiative. Based on the quantitative data (see Appendix E: Questions

6, 7, and 9), it became evident that a commitment to diversity was a common thread among the surveyed institutions, which catered to a broad spectrum of student populations, including first-generation students and those who are lesbian, gay, bisexual, transgender, or queer/questioning, plus others (LGBTQ+). However, there was considerable variability in how these diversity and inclusion initiatives were implemented and prioritized. Some institutions had well-established, deeply ingrained programs, while others showed less or unclear communication of such commitments. The range in the perceived importance of key performance indicators for diversity recruitment—from very important to moderately important—indicates that while diversity was valued, the extent to which it was woven into the fabric of institutional operations differed widely.

The qualitative insights provide depth to this picture. The narrative evidence suggests that the institution adopted a holistic and individualized education and student support approach, transcending traditional demographic categories. The concierge approach adopted by the university exemplifies its dedication to social equity by prioritizing the student's academic and professional trajectory, from the point of enrollment through to securing employment. This philosophy was applied consistently across the board, ensuring that every student was supported and valued, regardless of their racial, religious, or cultural background. The interviewee highlighted that their institution's practices reflected a culture that valued inclusivity and actively worked to ensure students' success in their respective fields.

Combining these findings, the overall synthesis indicates that while academic institutions universally recognize the importance of diversity, the degree of integration of social equity into recruitment metrics and the manifestation of these commitments in practical initiatives vary. Some institutions lead with innovative, student-centered approaches that align with diversity and

social mobility values, as evidenced by their rankings and employment outcomes. In contrast, others may need to develop more concrete programs and transparent strategies to support the diverse workforce initiative.

Integrative Analysis of Quantitative and Qualitative Data: RQ3

The analysis integrated findings from RQ3, which examined how equity-focused metrics varied with institutional size, type, and location. Qualitative themes—such as the minimal impact of DHS partnerships, symposium success, branding challenges, and diversity initiatives—correlated with quantitative data, demonstrating the complex interplay between institutional characteristics and the application of DEIA initiatives. Interviewees reported minimal DHS partnership effects, indicating how an institution’s size, type, and location could influence external partnership outcomes. The success of symposia highlighted resource dependency related to institutional size and type, while branding challenges reflected the impact of size and location on external DEIA perceptions. Diversity and inclusion initiatives appeared naturally aligned with the institution’s programs and demographics, influenced by size and type. Moreover, placement rates underscored how success measures, although shaped by institutional traits, could stand independently.

Quantitative data revealed variations in DEIA valuation between private and public colleges (Table 22) and differences in perceived DEIA effectiveness across institution types suggesting size and location effects. These findings and diverse engagement levels supported the qualitative insights. Interviews disclosed that universities’ diverse curricula and proactive programs marked diversity success, potentially linked to the size and program variety. A university’s location and single-campus strategy were beneficial for addressing regional needs and influencing equity metric implementation. In summary, universities took a comprehensive

approach to DEIA metrics, using their size, type, and location to foster diversity and inclusion. Internal benchmarks, like placement rates, indicated a commitment to student success, independent of DHS partnership impacts.

Integrative Analysis of Quantitative and Qualitative Data: RQ4

The integrative analysis revealed mixed perceptions among academic administrators regarding DHS partnerships, with three of the five participants (60%) uncertain and two of the five (40%) split between positive and negative views, despite no reported concerns. Most participants deemed DHS support accessible. RQ2 findings indicated that four of the five participants (80%) lack social equity prioritization in institutional agendas and similar gaps in recruitment metric adoption for diversity. For RQ3, the importance assigned to DEIA initiatives varied by institution, with some discrepancies noted in HSIs' prioritization of social equity. Cross-tabulation showed diverse views on DEIA importance and accessibility, and a comparison by institution type highlighted variations in DEIA valuation. In summary, a notable gap existed between recognizing DEIA's necessity and actual practice, with social equity and recruitment metrics being key areas of disparity. DEIA valuation and impact perceptions differed across institutions, influenced by size, type, and location, with HSIs less likely to prioritize social equity.

Conclusion

Chapter 4 presented the findings of a mixed methods narrative study to explore the dynamics of academic institutions that had signed formal MOUs with the DHS. The study collected responses from five surveys and one semistructured interview with an academic administrator. The qualitative exploration identified seven key themes that provided a rich narrative context to the numerical data.

Chapter 5 interprets and synthesizes these data sets, bridging the quantitative and qualitative domains. The chapter presents the overarching conclusions from the empirical evidence, offering a substantive understanding of the various academic institutions' collaborative engagements with DHS. Based on these insights, the chapter contains strategic recommendations for future scholarly inquiries and practical approaches within the academic–DHS partnerships. The reflective analysis aims to contribute to a more profound discourse on policy development and to enhance current practices, laying a foundation for academic and operational advancements.

Chapter 5: Discussion and Conclusion

In this chapter I pull together the empirical findings and theoretical insights from examining academic institutions' partnerships with the DHS. I focused on an MOU established by 23 U.S. academic institutions with the DHS. My investigation yielded a multifaceted view of the academic sector's engagement with national security initiatives, uncovering the nuanced interplay between policy objectives and on-the-ground realities of fostering a diverse public sector workforce. I use Chapter 5 to articulate the theoretical framework of bounded rationality by applying the theory to RQs 1, 2, and 3. Subsequently, I integrate the research findings with the theoretical propositions to offer a coherent narrative explaining academic–DHS collaborations from the five participants' current and future trajectories. I include the implications of insights for policy and practice and proposed directions for future research.

Discussion

The discussion includes implications of the results, connections to theory, and challenges faced. Only five out of the 23 academic institutions contacted participated in the research study, resulting in a participation rate of about 22%. I identified one POC at each participating institution noted on the MOU. These individuals were approached using various communication strategies, including but not limited to two email waves accompanied by telephone calls; voicemails were left when direct contact was not established. I conversed with two individuals during the telephone outreach to the 23 identified POCs. The initial POC, upon contact, clarified their role as administrative, indicating they were not the subject matter expert on the academic partnership. This individual then directed me to an alternative colleague, providing specific contact details. Subsequently, I reached out to the suggested party and left a detailed voicemail

regarding participation in the study. However, this attempt did not yield a response or indication of willingness to participate in the survey or interview. My second telephone attempt resulted in a dialogue with the designated POC. The POC acknowledged the research's merit but indicated the need to obtain authorization from their academic institution before providing substantive comments or participating in the survey or interview. Such institutional approval was not yet in place. Subsequent attempts to follow up with this POC did not yield any further communication.

I examined the empirical data's intersection with bounded rationality (Simon, 1957). This theory explains the data's limitations by providing a lens through which I have interpreted academic administrators' engagement with DHS partnerships and operationalizing diversity initiatives in higher education. Through this bounded rationality framework, it became evident that decision-making processes in academic institutions are subject to cognitive limitations and constraints, which can shape the execution and effectiveness of such initiatives.

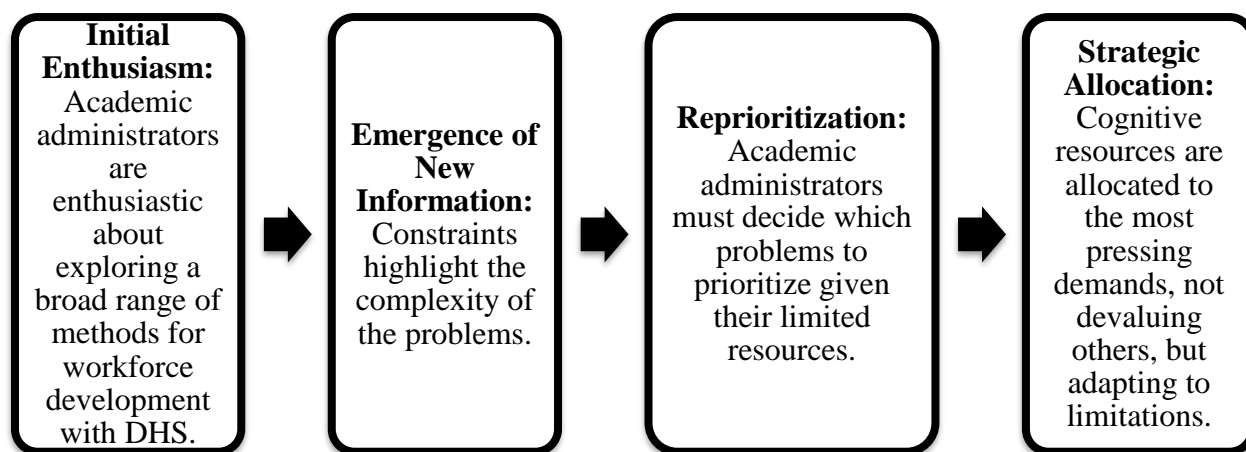
Bounded Rationality

The bounded rationality model proposed by Simon (1957) is explained in Figure 3, illustrating the decision-making process of academic administrators who must prioritize issues while grappling with cognitive constraints. Such limitations can result in fluctuating levels of commitment to various initiatives; for instance, the initial vigor for enhancing social equity in recruitment may wane as competing concerns emerge and compete for attention. This phenomenon should not be misconstrued as a devaluation of diversity; rather, it represents a tactical distribution of cognitive resources (Simon, 1957). Simon's conceptualization, which includes purposeful rationality, flexibility in response to changing circumstances, and the ability to cope with ambiguity, offers a framework that Jones (2002) argues more faithfully represents

the intricacies of decision-making in public policy contexts. Figure 3 demonstrates the application of bounded rationality through the various steps.

Figure 3

Bounded Rationality



Initial Enthusiasm

In the initial stages of engagement with research studies, academic administrators demonstrate a strong enthusiasm, indicative of an open and exploratory approach to institutional development. This phase is characterized by a willingness to consider various initiatives, reflecting an optimistic allocation of attention and resources toward new collaborations and projects.

Emergence of New Information

As institutional demands intensify and new information surfaces, POCs are faced with the reality of their cognitive limitations. This phase marks a turning point where the complexity of issues becomes more apparent, necessitating a reassessment of their initial commitments. The constraints imposed by these new challenges require POCs to acknowledge the bounded nature of their rationality in decision-making.

Reprioritization

With the recognition of limited resources and shifting institutional needs, administrators enter a phase of reprioritization. In this context, they must decide which projects to continue supporting strategically. This often leads to a realignment of their focus, with some initiatives, such as diversity recruitment, being given precedence based on current demands and the institution's strategic goals.

Strategic Allocation

The final phase involves strategically allocating attention and resources, guided by a pragmatic approach to the most pressing demands. While not devaluing their initial interests, administrators are compelled to adapt to the limitations imposed by their environment. This strategic realignment does not lessen the importance of previous commitments but instead reflects a sophisticated balancing act of adapting priorities per Simon's (1957) bounded rationality theory. This adaptability is crucial for maintaining institutional agility and responsiveness to the ever-evolving academic landscape.

Theoretical Findings

Bounded rationality theory provides a robust framework for interpreting the engagement levels of academic administrators with DHS collaborations and the execution of diversity initiatives within their institutions. The research in Phase 2 revealed notable challenges, such as modest participation rates and communication barriers with POCs, which bounded rationality can fittingly describe. Additionally, bounded rationality can help explain the inclination of academic administrators to shift their focus from initial collaborative enthusiasm to other pressing institutional demands, resulting in the fluctuating prioritization of diversity and workforce initiatives.

Research Findings Related to the Theory

The semistructured interview revealed that academic administrators' decision-making process aligns with Simon's (1957) theory of bounded rationality due to cognitive and resource limitations. Prioritization is crucial, as shown by the finding that three out of five (60%) were undecided about the value of the DHS partnership. While administrators may initially be enthusiastic about such initiatives, their enthusiasm may fluctuate as other institutional needs arise. Additionally, the finding that four of the five (80%) institutions lacked specific recruitment metrics to support equity and diversity initiatives indicates a reallocation of focus, possibly due to other pressing concerns.

Table 23 aligns the themes with the concept of bounded rationality by illustrating how academic institutions' decision-making processes—regarding their partnerships with DHS—are influenced by their limitations in information, resources, and cognitive capabilities. These limitations shape their strategies, expectations, and evaluations of the partnership's impact and effectiveness.

Table 23*Theme Connection to Bounded Rationality*

Theme	Connection to bounded rationality
Minimal impact of DHS partnership	Institutions assess the benefits and limitations of their partnerships within the context of bounded rationality, recognizing that their expectations and the actual outcomes may not align due to limited information and resource constraints.
Self-reliance of the institution	Reflects the strategic decision-making process under conditions of bounded rationality where institutions prioritize independence and develop strategies within their cognitive and resource limitations.
Symposium success and missed opportunities	Institutions evaluate the outcomes of collaborative events through the lens of bounded rationality, identifying unrealized opportunities within the constraints of their understanding and capabilities.
Lack of direct impact from DHS	Demonstrates the institutions' evaluation of the partnership's direct effects on practical outcomes, a decision-making process influenced by the limitations of their knowledge and the perceived benefits of the partnership.
Branding and visibility challenges	Institutions face challenges in branding and public recognition, addressing these issues within the confines of bounded rationality by strategizing based on their understanding and resources.
Diversity and inclusion initiatives	Reflects the institutions' efforts to commit to diversity and inclusion, acknowledging the challenges at different institutional levels within the framework of bounded rationality, where decisions are made based on available information and resources.
Placement and success metrics	Institutions measure success in alignment with or without the influence of the DHS partnership, illustrating the application of bounded rationality in evaluating and setting metrics based on available data and strategic priorities.

Note. DHS = U.S. Department of Homeland Security.

Implications for Academic–DHS Partnerships

Optimizing the relationship between academic institutions and the DHS requires a multifaceted approach. Collaboration is crucial, and building upon the foundation of MOUs is a good way to establish a more structured collaboration. Developing joint programs, sharing resources, and ensuring regular interactions for the benefit of all involved stakeholders.

In addition, revisiting and enhancing communication strategies is critical. A robust flow of communication can synchronize the expectations and contributions of both DHS and academic institutions. Strategic dialogue is essential to support and give proper value to initiatives from both sides (Hoon, 2007). It can be the backbone of a successful partnership by fostering mutual understanding and ensuring all efforts are acknowledged and effectively leveraged.

Lastly, redefining mutual goals is imperative to align the investments of academic institutions in human capital with the workforce requirements of DHS (2020). Establishing clear and shared objectives would encapsulate the partnership's ambitions and ensure that all actions are directed toward creating a diverse public sector workforce. This synergy between academic preparation and workforce demands is crucial for a reciprocal partnership and is oriented toward tangible outcomes in workforce diversity.

Private Institutions and DHS Partnerships

The active involvement of private academic institutions with the DHS suggests a strategic alignment that enhances and broadens the conventional frameworks of academic–federal partnerships. This is supported by the DHS's (2023) efforts to engage with the academic community on concerns related to homeland security to fill the gap in the workforce. The OAE intends to strengthen relationships in engagement, resilience, and outreach. Private institutions often respond more quickly and adaptively to the changing needs of the DHS and the workforce, likely due to their independent governance structures and alternative funding sources. Public–private partnerships are widely recognized for their potential to enhance the DHS's capabilities and increase the overall mission's success. Such collaborations are also believed to quicken the implementation of impactful solutions, as discussed by Moss et al. (2019) and Petersen et al.

(2012). These partnerships exemplify how combining public oversight with private-sector efficiency can potentially lead to swift and innovative responses to national security challenges.

Public institutions often face more bureaucratic oversight and funding constraints, which can slow down decision-making or adjustments to the DHS's changing needs, according to Goodman and Loveman (1991). As Busch and Givens (2012) noted, the agility of private institutions adds flexibility to the security sector when they partner with the DHS. Private entities may be part of a shift toward a market-driven model in public services, where privatization brings in efficiency and expertise. This shift aligns with the DHS's goal to integrate innovative solutions and respond to new threats.

Privatization benefits the public by performing functions that the private sector can handle more efficiently, Goodman and Loveman (1991) suggested. However, this trend toward privatization calls for a careful examination of public accountability and fair service delivery (Dutzik et al., 2009). Cellucci (2010) emphasized that as private institutions become more involved in homeland security, their cooperation with the DHS must remain transparent and in line with public interests.

Diversity, Equity, Inclusion, and Accessibility

DEIA values are increasingly recognized as crucial for institutions in the current academic landscape. These values contribute to the broader discourse on the role of higher education institutions in fostering an inclusive society and intersecting with national security concerns. Effective knowledge management practices can significantly contribute to fostering an environment that supports innovation and performance by utilizing diverse human capital (Inkinen, 2016). However, the variability in accessibility to DHS support adds complexity to academic–federal partnerships. Inkinen suggested that standardizing processes and implementing

effective knowledge management practices can improve joint initiatives' design and delivery, thus enhancing support mechanisms' predictability and reliability.

Integrating Quantitative and Qualitative Insights in Research

To better understand the thoughts and experiences of participants, it is essential to rely on quantitative data and incorporate qualitative insights (Hussain & Li, 2022). Innovative research methods may be required to provide a more comprehensive and authentic representation of participant perspectives. Research has shown that collecting and sharing information as a dynamic capability in knowledge management can improve organizational performance (Hussain & Li, 2022). This suggests that any differences between reported data and interview insights can be addressed by promoting a culture of knowledge sharing within organizations, ultimately leading to better dynamic capabilities.

Strategic Approaches to Diversity Recruitment

Finally, it is crucial to identify any strategic gaps in diversity recruitment to implement commitments to diversity effectively. According to Inkinen (2016), specific organizational and managerial practices related to knowledge management correlate with firm performance. Therefore, actionable frameworks and targeted strategies must go beyond empty promises and achieve measurable outcomes. However, according to the data collected in this research study, the participating academic institutions and the DHS do not track diversity in recruitment.

Educational Practices and Diversity

A Brookings Institution report titled *Transforming Education for Holistic Student Development: Learning from Education System (Re)building Around the World* (Datnow et al., 2022) underscored the need for education systems that support academic learning and students' social, emotional, moral, and civic development. This holistic approach is critical in a global

policy context emphasizing academic quality and equity. Such an approach does not compromise academic rigor but goes beyond it to support the comprehensive development of students.

Furthermore, holistic admissions in higher education, which consider a variety of student qualities and experiences beyond test scores, can be an effective strategy to advance diversity (Bastedo, 2021). Holistic review practices have reportedly been adopted by many institutions, although there is no standard definition and practices vary widely across institutions (Bastedo, 2021). Studies promoting diversity and inclusion within educational settings indicate that interventions focused on social norms can influence behaviors and attitudes, contributing to a more inclusive environment. For instance, social contact and cooperative learning have been found to reduce prejudice and discrimination, thereby fostering a more inclusive atmosphere for diverse student bodies (Moreu et al., 2021).

Strategic Academic–DHS Partnerships for Innovation

According to Cellucci (2010), fostering academic–DHS partnerships is crucial for innovation and addressing homeland security challenges. Strategic development and policy frameworks play a vital role in this process. Cellucci highlighted the importance of proactive recruitment and networking to attract a diverse pool of highly qualified candidates. Proactive recruitment and networking enhance the potential for creative and productive outcomes, ultimately benefiting organizations, including DHS.

The OAE has forged valuable partnerships with the academic community, recognizing the immense benefits of collaboration with the academic community. Through its diverse initiatives, including faculty exchange, academic research, cybersecurity, and student recruitment, the OAE is dedicated to fostering a robust and resilient academic environment (DHS, 2023). Additionally, there is a demand for survey methodologies that accurately capture

the intricate dynamics of these partnerships. This may involve creating metrics to assess the effectiveness of diversity and equity efforts in recruitment and retention plans and ensuring that these principles are genuinely implemented within the DHS. Equally crucial is the need for policies that acknowledge the interplay between academic institutions and national security and appreciate the invaluable insights that diverse perspectives can offer the field of homeland security. Research indicates that to effectively implement diversity values in recruitment and retention strategies, it is beneficial to establish diverse talent pools and for institutions to demonstrate unwavering commitment to such practices (Kekäle, 2017). Additionally, it is crucial to ensure that recruitment decisions are free from discrimination and prioritize long-term competence and diversity in the workforce.

Contributions to Practice and Literature

This research used an explanatory sequential design to contribute to the fields of the OAE under the DHS, academic partnerships, and workforce development.

Contributions to Practice

Contributions to Practice for the OAE Under DHS

Although derived from a limited sample of five academic institutions, the research study's findings provide policymakers with valuable quantitative and qualitative insights into the dynamics of academic partnerships with the DHS. These insights include critical stakeholder perspectives for refining the strategies and processes underpinning these collaborations. Leveraging these comprehensive data, policymakers can develop, implement, and optimize initiatives to improve the synergy between academic environments and the DHS's workforce development objectives. Policymakers anticipate that enhancing these initiatives will solidify the relationship between DHS and educational institutions and fulfill the agency's overarching goal

of reinforcing the national workforce. This is particularly pertinent for generating a pipeline of skilled professionals equipped to meet the demands of critical sectors, thereby contributing to the broader aim of fortifying national security and resilience.

Contributions to Practice on the Academic Partnerships

This study's findings shed light on the intricate dynamics of academic partnerships with the DHS and the integration of social equity into recruitment. An administrator reported the limited impact of DHS collaborations but maintained a dedication to their institution's objectives, highlighting the potential for stronger cooperation. My research showed that although there is a broad commitment to diversity, its implementation in recruitment significantly differs among institutions. Some academic institutions implement a concierge approach, personalizing support to meet the individual needs of students, which demonstrates a strong commitment to social equity. However, other institutions need to improve their diversity initiatives and communication to effectively support workforce diversity.

Furthermore, the influence of institutional characteristics on equity-focused metrics was evident, affecting the efficacy of partnerships and diversity programs (Interagency Working Group on Inclusion in STEM, 2021). Variability in DEIA valuation between institution types was apparent, and findings from interviews indicated that a university's curriculum diversity and focused strategy could significantly affect its engagement and equity practices (Fradella, 2018). Overall, the study enriches the understanding of DEIA in academic partnerships, emphasizing the need for institutions to align their practices with diversity objectives to improve partnerships and contribute to the national goal of developing a skilled workforce in high-demand areas.

Contributions to Practice on Workforce Development

This study advances the understanding of workforce development through academic partnerships with the DHS, highlighting social equity's critical role in recruitment. An academic administrator noted the limited impact of the DHS partnership yet maintained a dedication to institutional goals, indicating the potential for more effective collaboration. Analysis shows that DHS partnerships exert minimal effect, with the success of DEIA efforts largely depending on institutional characteristics.

While institutions monitor internal benchmarks such as placement rates, the implementation and impact of DEIA vary, particularly among HSIs, which emphasize less social equity. The study reveals a discrepancy between the acknowledgment of DEIA's importance and its practical application, emphasizing the need for institutions to integrate diversity values into their operations to enhance academic partnerships and achieve workforce development goals.

Recommendations from the study call for strategic improvement in DEIA practices to strengthen workforce development initiatives (Nanda et al., 2023). An Interagency Working Group on Inclusion in STEM report (2021) promoted high-quality science, technology, engineering, and mathematics (STEM) education accessible to all Americans, focusing on diversity and inclusion to expand participation in STEM fields. The report aimed to remove barriers for underrepresented groups, fostering innovation and competitiveness by including diverse perspectives.

Contributions to the Literature

The contributions of this study to the literature on the OAE under the DHS, academic partnerships, and workforce development are significant and diverse, offering new insights into the complexities of these interactions. Using an explanatory sequential design, this research

clarifies existing practices within these partnerships. It enriches academic discourse by comprehensively analyzing the multifaceted relationships between academic institutions and the DHS (White House Initiative on Historically Black Colleges and Universities, 2023). Furthermore, the findings contribute to a deeper understanding of how these collaborations can enhance workforce development strategies, offering valuable policy and practice recommendations in public administration and national security (*National Security*, 2010; Office of the National Cyber Director, 2023; Orrell et al., 2023).

Contributions to Literature on the OAE

The study enhances the existing literature by providing empirical data on stakeholders' perspectives from institutions with active MOUs with the DHS. This empirical evidence enriches the theoretical understanding of how these partnerships function and their efficacy in meeting workforce development objectives. My research underscores the need for policy evolution to better harness the potential of academic collaborations.

Contributions to Literature on Academic Partnerships

This research contributes to the body of literature on academic partnerships by exploring the nuanced dynamics of DHS collaborations and the integration of social equity in recruitment strategies. Further, this research highlights the variability in implementing diversity across institutions, offering a comparative analysis that can inform future studies on effective practices in educational partnerships (Massachusetts Institute of Technology, 2010). The insights into the concierge approach versus more standardized models provide a basis for further research into personalized support systems and their impact on diversity and inclusion outcomes.

Contributions to Literature on Workforce Development

Significantly, this study advances the literature on workforce development by contextualizing the role of academic partnerships with the DHS and integrating social equity in recruitment within the broader goals of national workforce preparation. It highlights the varying impacts of such partnerships on the successful application of DEIA efforts and offers a critical analysis of the internal and external benchmarks institutions use to gauge success. This aspect of the research may stimulate additional inquiry into how DEIA initiatives can be more strategically integrated into workforce development programs to meet national objectives.

The study's findings serve as a call to action for strategically enhancing DEIA initiatives within academic partnerships. It contributes to the literature by identifying current practices and challenges and suggesting a pathway for improved collaboration between academic institutions and the DHS. My research can thus serve as a foundation for subsequent studies aiming to bridge the gap between the acknowledgment of DEIA's importance and its practical implementation, ultimately aiming to enrich policy and practice in academic partnerships and workforce development. Table 24 provides a comprehensive overview of the contributions to practice from various segments concerning partnerships between academic institutions and the DHS.

Table 24

Contributions to Practice

Contribution	Summary
Office of Academic Engagement under DHS	Enhanced the understanding of stakeholder viewpoints among policymakers. Delivered concrete data from ongoing memorandums of understanding with the DHS, shedding light on the effectiveness of these partnerships. Championed changes in policies to more effectively harness the potential of academic partnerships for the advancement of workforce development.

Academic partnerships	<p>Illuminated the intricacies of partnerships between academia and the DHS, focusing on how social equity is woven into recruitment strategies.</p> <p>Highlighted the differences in how diversity is embraced and executed among various institutions, providing a foundation for understanding what practices work well.</p> <p>Investigated the differences between bespoke support services and uniform support frameworks, setting the stage for future studies on the effect of tailored support on diversity achievements.</p>
Workforce development	<p>Deepened insights into workforce development facilitated by collaborations between academia and the DHS.</p> <p>Investigated how social equity factors into recruitment strategies as part of wider workforce training objectives.</p> <p>Emphasized the diverse effects that partnerships exert on diversity, equity, inclusion, and accessibility (DEIA) initiatives.</p> <p>Conducted a thorough evaluation of the benchmarks, both internal and external, that institutions employ to gauge success.</p> <p>Urged a deliberate improvement of DEIA efforts within these partnerships, aiming to close the gap between formal recognition and actual execution, thereby enhancing both policies and practices.</p>
Literature on the Office of Academic Engagement under DHS	<p>Supplied concrete data reflecting stakeholder viewpoints, enhancing the theoretical grasp of partnership dynamics.</p> <p>Emphasized the imperative for policy development to fully realize the potential of partnerships.</p>
Literature on academic partnerships	<p>Delved into the detailed interactions between academic institutions and the DHS regarding the incorporation of social equity.</p> <p>Observed the range of approaches to diversity across different institutions.</p> <p>Analyzed how various models of support systems influence diversity results.</p>
Literature on workforce development	<p>Framed the significance of collaborations between academia and the DHS within the scope of preparing the national workforce.</p> <p>Investigated the influence of these partnerships on DEIA actions and the criteria for measuring success.</p> <p>Advocated for a deliberate improvement of DEIA measures within these collaborative efforts.</p> <p>Provided perspectives on closing the divide between the recognition and actual application of DEIA principles in workforce training.</p>

Note. DHS = U.S. Department of Homeland Security.

Recommendations for Future Research

To develop effective recruitment strategies for academic partnerships, it is crucial to recognize and respond to potential candidates' varied preferences and experiences. Conducting

thorough research can provide valuable insights into the individual motivators and challenges that candidates face, especially concerning their career stage. It is also beneficial to consider how combining digital tools and traditional engagement methods can be tailored to meet various preferences. Ultimately, the aim should be to foster inclusivity and accessibility by creating recruitment initiatives that are both responsive and relatable to a diverse pool of candidates.

Qualitative Assessment of Participant Experience

While providing valuable initial insights into the OAE, the current research acknowledges certain limitations that, if addressed, could significantly deepen the understanding of the program's impact. The study was constrained by a modest sample size that consisted of one qualitative interview and five quantitative surveys. While these provided preliminary data, the scope was insufficient to capture the full complexity of participants' experiences and the broader systemic implications of the programs.

An expanded study with a more robust qualitative component could offer a richer exploration of participant narratives, delving into motivations, challenges, and perceived values (i.e., phenomenology) associated with the OAE. Employing a thematic analysis of a larger set of interviews or conducting ethnographic studies would uncover the participants' nuanced, day-to-day realities and emotional landscapes (E. Knott et al., 2022). This would add depth to the existing findings and contribute to developing tailored support systems within the programs, directly addressing the identified challenges and enhancing participant experiences.

Future research should consider a more comprehensive study design that engages a larger, more diverse cohort of participants. This approach would yield a broad spectrum of experiences, facilitating the identification of commonalities and diversities in program effectiveness. Ensuring a sample size that is statistically significant and demographically

representative is crucial for the generalizability of the findings. Stratified sampling techniques could be employed to guarantee that all relevant subgroups are included, providing a more complete picture of the program's reach and influence. These methods could highlight how the program translates into practical skills, professional relationships, and career trajectories over time.

While this study has laid the groundwork for understanding the OAE influence, future research should aim to build upon this foundation with a more extensive and methodologically diverse approach. Such research would validate and potentially expand upon the initial findings and provide a comprehensive perspective that could inform policy decisions to better serve academic administrators in meeting federal workforce development demands, thereby addressing the complex dynamics between educational institutions and national security objectives within the bounded rationality framework.

Benchmarking Against Other Initiatives

Comparative research that benchmarks the OAE against other initiatives could provide a more comprehensive picture of federal recruitment efforts. Studies could assess the effectiveness of various governmental initiatives, such as the PMF Program, the Recent Graduates Program, and the Pathways Programs, by examining participant demographics, levels of satisfaction, and subsequent career accomplishments. Such comparisons could reveal insights into the most effective recruitment and retention strategies elements, which could be synthesized into best practice guidelines for federal agencies.

Program Policy and Economic Analysis

To conduct a comprehensive policy and economic analysis of the OAE, an investigation into their alignment with federal workforce development objectives is crucial. This would

include reviewing strategic goals from pivotal policy documents and determining how the programs measure against these benchmarks. Financial sustainability would be scrutinized by evaluating funding sources, budget allocations, and resource utilization efficiency (Sontag-Padilla et al., 2012). A rigorous cost-benefit analysis would be essential to quantify the direct administrative costs against the broader, indirect benefits such as enhanced workforce skills and diversity.

Moreover, assessing the impact on public service delivery would involve analyzing agency performance metrics pre- and postimplementation of the MOUs established with the OAE and soliciting feedback from service recipients. Policy analysis would play a critical role in pinpointing the support these programs provide to overarching government policy goals, such as skill development and employment for graduates, and suggesting refinements to improve their efficacy.

Implications for Future Research

My experience influences future research directions. These experiences highlight the importance of having a flexible research design, especially in fields where data can be hard to find or unconventional. In the future, researchers should explore existing data or alternative analytical frameworks to avoid the challenges I encountered during this dissertation research. Despite its limitations, this research contributes to the broader conversation on evaluating public initiatives and the unique challenges of collaborations between academic and government entities.

After reflecting on the methodological journey of this dissertation, I realized that the inquiry process is just as important as the findings themselves. The challenges faced during the data collection phase, such as the low response rate from participating institutions and the

logistical difficulties of tracking large-scale workforce metrics, highlighted the complexities of conducting research within the structures of federal programs. These experiences emphasized the importance of having flexible and adaptive research designs and the value of persistence and resourcefulness when facing methodological obstacles. Table 25 outlines recommendations for future research in four key areas related to academic partnerships and program analysis.

Table 25

Recommendations for Future Research

Recommendation	Summary
Effective recruitment strategies for academic partnerships	Undertake comprehensive investigations to grasp the preferences and experiences of candidates. Integrate digital platforms with conventional strategies, customizing to suit varied preferences. Promote an environment of inclusivity and accessibility within recruitment efforts.
Qualitative assessment of participant experience	Broaden the research scope with a strong qualitative aspect to delve into participant stories more thoroughly. Utilize thematic analysis or ethnographic approaches for a detailed comprehension. Guarantee the sample size is both statistically significant and reflects demographic diversity.
Benchmarking against other initiatives	Apply stratified sampling methods to gain thorough insights. Perform comparative studies to assess the Office of Academic Engagement (OAE) in relation to other federal programs. Analyze the results, including the demographics of participants, their satisfaction levels, and career progress. Compile the successful components into a set of best practice recommendations for federal agencies.
Program policy and economic analysis	Examine how well the OAE aligns with objectives for federal workforce development. Analyze strategic objectives and evaluate the effectiveness of the program in relation to established benchmarks. Conduct an assessment of financial viability and perform a cost-benefit analysis. Determine the effect on the delivery of public services and propose improvements.
Implications for future research	Underline the necessity for adaptable research methodologies, particularly in areas lacking data. Investigate novel approaches for data gathering and analysis techniques.

Enhance the assessment of public programs and tackle the intricacies of partnerships between academia and government.
Stress the critical role of the research process in addition to the results obtained.
Recognize obstacles and champion the use of flexible research strategies.
Highlight the need for determination and ingenuity in navigating research challenges.

Conclusion

The data from the study describe the complexity of interinstitutional collaborations and underscore their role in cultivating a public sector workforce that embodies the diversity and skill necessary for workforce initiatives to address gaps in homeland security initiatives (Simon, 1957). My research has demonstrated, through bounded rationality, that engagement with DHS initiatives fluctuates with institutional focus and the strategic distribution of resources (Simon, 1957). This study's use of quantitative and qualitative methods indicates that, despite the declared aim of diversity, its execution remains inconsistent and varies with institutional characteristics like size, type, and location (Bastedo, 2021; Moreu et al., 2021).

Furthermore, this study underscores the importance of devising adaptable policies and programs while acknowledging the cognitive constraints in decision-making. Simon's (1957) bounded rationality concept encapsulates the decision-making challenges within such limitations, especially pertinent to academic administrators balancing various demands with finite cognitive capacities, often deprioritizing critical tasks such as diversifying recruitment. This research's theoretical and empirical evidence constructs a robust case for strategies that uphold a diversity commitment amid competing priorities. Consequently, future research should build on this foundation, utilizing longitudinal studies to deepen understanding of these impacts of academic–DHS partnerships (Cellucci, 2010; Dutzik et al., 2009).

This research contributes significantly to the field of academic–public sector collaboration. It particularly highlights the need for a diverse and well-equipped workforce. It calls for a strategic approach that navigates the variable attention and pragmatic resource allocation within academia (Kekäle, 2017). This study marks a critical waypoint for ongoing exploration into the long-term success of academic–DHS partnerships in fulfilling public service demands.

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Appendix A: Informed Consent Interview

Consent Form for participation in the research study titled “Examining Academic Partnerships: A Mixed Methods Analysis of the Perceptions and Impacts of Homeland Security’s Engagement with Higher Education Institutions”

IRB protocol #: FY2023-381

Program Investigator: Frederick W. Turner II, Ph.D.

Dissertation Chair: Mia Ocean, Ph.D.

Project Overview: Participation in this research project is voluntary and is being done by

Frederick W. Turner II as part of his doctoral dissertation to:

This study seeks to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed Memorandums of Understandings (MOU) with the Department of Homeland Security (DHS) between 2021-2023. A mixed methods research design will be used to gather data from faculty and administrators to understand the benefits and challenges of these collaborations. Your participation will take approximately 30 to 45 minutes for ten semi-structured interview questions. Responses to survey questions may lead to the identification of your academic institution. The collected data will be anonymized, aggregated, and lack sensitive personal information; the severity of privacy risks would be relatively low. While there are no direct benefits for participants, your contribution will aid in advancing this research.

Frederick W. Turner II, Ph.D., is a doctoral student at West Chester University conducting research as part of his doctoral dissertation to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed MOUs with the DHS between 2021-2022. Using a mixed methods approach, the researcher will gather data from faculty and administrators to understand the benefits and challenges of these collaborations.

If you want to participate, West Chester University requires you to agree to this consent form. You may contact Frederick W. Turner II, Ph.D., any questions to help you understand this study.

If you do not want to be a part of this study, it will not affect any services from West Chester University. If you choose to participate in this study, you can change your mind and stop participating anytime.

1. What is the purpose of this study? This study intends to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed MOUs with the DHS between 2021-2022. Using a mixed methods approach, this research can gather data from faculty and administrators to understand the benefits and challenges of these collaborations.
2. If you choose to participate in this study, you will be invited to an interview session where the researcher will pose ten semi-structured interview questions to you. This will allow the researcher to gather insights based on your experiences and knowledge. Your participation will take approximately 30 to 45 minutes for ten semi-structured interview questions.
3. Are there any experimental medical treatments? No

4. Is there any risk to me? Responses to survey questions may lead to the identification of your academic institution. If you become upset and wish to speak with someone, please direct your questions to Frederick W. Turner II, Ph.D., and then if you are unsatisfied, you may speak with Mia Ocean, Ph.D. If you experience discomfort, you can withdraw at any time.

5. Is there any benefit to me? There is no direct benefit to participants.

6. How will you protect my privacy? The session will be recorded, and your records will be private and kept confidential. Only Frederick Turner, Ph. D., Mia Ocean, Ph. D., and the IRB will have access to your name and responses. Your name will not be used in any reports. Your responses will be stored in a password-protected computer. All records will be destroyed three years after the study is completed.

7. Do I get paid to take part in this study? No

8. Who do I contact in case of research-related injury? If you have questions about this study, please reach out to the lead researcher, Dr. Frederick W. Turner II, at 757-319-6533 or FT977909@wcupa.edu. If needed, you can also contact the secondary researcher, Dr. Mia Ocean, at MOcean@wcupa.edu.

9. What will you do with my Identifiable Information? Your information will not be used or distributed for future research studies. For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

By selecting 'I consent' and continuing, I confirm that I have thoroughly read and understood the contents of this form. I acknowledge my understanding and voluntarily give my agreement to proceed.

I consent (1)

I do not consent (2)

Appendix B: Informed Consent Survey

Perceptions and Outcomes of the Department of Homeland Security's Office of Academic Engagement

Consent Form for participation in the research study titled "**Examining Academic Partnerships: A Mixed Methods Analysis of the Perceptions and Impacts of Homeland Security's Engagement with Higher Education Institutions**"

IRB protocol #: FY2023-381

Program Investigator: Frederick W. Turner II, Ph.D.

Dissertation Chair: Mia Ocean, Ph.D.

Project Overview: Participation in this research project is voluntary and is being done by Frederick W. Turner II as part of his doctoral dissertation to:

This study seeks to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed Memorandums of Understandings (MOU) with the Department of Homeland Security (DHS) between 2021-2023. A mixed methods research design will be used to gather data from faculty and administrators to understand the benefits and challenges of these collaborations. Your participation will require approximately ten minutes to complete a questionnaire, with the option of a voluntary interview afterward at a later date. There are no risks or identifiable drawbacks associated with participation. While there are no direct benefits for participants, your contribution will aid in advancing our research.

Frederick W. Turner II, Ph.D., is a doctoral student at West Chester University conducting research as part of his doctoral dissertation to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed MOUs with the DHS between 2021-2022. Using a mixed methods approach, the researcher will gather data from faculty and administrators to understand the benefits and challenges of these collaborations.

If you want to participate, West Chester University requires you to agree to this consent form. You may contact Frederick W. Turner II, Ph.D., any questions to help you understand this study.

If you do not want to be a part of this study, it will not affect any services from West Chester University. If you choose to participate in this study, you can change your mind and stop participating anytime.

1. What is the purpose of this study? This study intends to better understand the perspectives and contributions of 23 U.S. academic institutions, both state and private, that formed MOUs with the DHS between 2021-2022. Using a mixed methods approach, we gather data from faculty and administrators to understand the benefits and challenges of these collaborations.
2. If you decide to be a part of this study, you will be asked to do the following: Participate in the questionnaire. This study will take ten or less minutes of your time. There is an optional interview after the questionnaire.
3. Are there any experimental medical treatments? No

4. Is there any risk to me? Possible risks or sources of discomfort include no identifiable risks. If you become upset and wish to speak with someone, please direct your questions to Frederick Turner, Ph.D., and then if you are unsatisfied, you may speak with Mia Ocean, Ph.D. If you experience discomfort, you can withdraw at any time.

5. Is there any benefit to me? Benefits to you may include no benefits. Other benefits may include: There is no direct benefit to participants.

6. How will you protect my privacy? The session will be recorded, and your records will be private and kept confidential. Only Frederick Turner, Ph. D., Mia Ocean, Ph. D., and the IRB will have access to your name and responses. Your name will not be used in any reports. Your responses will be stored in a password-protected computer. All records will be destroyed three years after the study is completed.

7. Do I get paid to take part in this study? No

8. Who do I contact in case of research-related injury? If you have questions about this study, please reach out to the lead researcher, Dr. Frederick W. Turner II, at 757-319-6533 or FT977909@wcupa.edu. If needed, you can also contact the secondary researcher, Dr. Mia Ocean, at MOcean@wcupa.edu.

9. What will you do with my Identifiable Information? Your information will not be used or distributed for future research studies. For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

By selecting 'I consent' and continuing, I confirm that I have thoroughly read and understood the contents of this form. I acknowledge my understanding and voluntarily give my agreement to proceed.

I consent (1)

I do not consent (2)

Appendix C: Recruitment Email



Department of Public Policy and Administration

Dear Participant,

I invite you to participate in an important research study titled “**Examining Academic Partnerships: A Mixed Methods Analysis of the Perceptions and Impacts of Homeland Security’s Engagement with Higher Education Institutions**”

Why This Study?

This research, led by Dr. Frederick W. Turner II, aims to explore the academic partnerships between 23 U.S. educational institutions (both public and private) and the Department of Homeland Security’s Office of Academic Engagement from 2021 to 2023. This study seeks to learn about the benefits and difficulties associated with these established Memorandums of Understanding.

What Will Be Expected of You?

1. **Questionnaire:** A 10-minute questionnaire seeking your insights.
2. **Optional Interview:** A follow-up interview if you are interested.

Key Information:

- **Risks:** There are no identifiable risks associated with participating.
- **Benefits:** While there is no direct benefit to you, your insights will significantly enhance the understanding of these academic partnerships.
- **Privacy:** Your participation is confidential. Only a select few, including Dr. Fred Turner, Dr. Mia Ocean, and the IRB, will have access to specific details. All data will be deleted three years post-study.

Compensation: This is a voluntary study, and there will be no compensation.

To participate in this academic endeavor, click the link [HERE](#) to access the online survey. Upon access, you will be directed to a consent form where you can select ‘I consent’ or ‘I do not consent’ not to participate.

For any questions or clarifications, contact Dr. Frederick W. Turner II at 757-319-6533 or FT977909@wcupa.edu. Dr. Mia Ocean is also available at MOcean@wcupa.edu.

Thank you for considering this opportunity to contribute to our understanding of academic collaborations.

Warm regards,

Frederick W. Turner II, Ph.D.
 Primary Investigator
 IRB protocol #: FY2023-381
 West Chester University

Appendix D: Survey

- 1) What type of academic institution do you work for?
 - a. Private college or university
 - b. Public college or university
 - c. Community college
 - d. Liberal Arts college
 - e. Research university
 - f. Other (please specify)

- 2) What is your primary role within the institution? Select all the apply.
 - a. Faculty
 - b. Staff
 - c. Administration
 - d. Other (please specify)

- 3) What is your length of employment at the institution?
 - a. Less than 1 year
 - b. 1-3 years
 - c. 4-6 years
 - d. 7-10 years
 - e. More than 10 years

- 4) How does your academic institution identify in terms of accreditation? (Please select all that apply.)
 - a. Hispanic-Serving Institution (HSI)
 - b. Historically Black College or University (HBCU)
 - c. Tribal College or University (TCU)
 - d. Other (please specify)

- 5) To what extent does your academic institution cater to specific populations? (Please select all that apply.)
 - a. First-generation college students
 - b. Underrepresented minorities
 - c. LGBTQ+ students
 - d. Students with disabilities
 - e. International students
 - f. Non-traditional students
 - g. None of the above
 - h. Other (please specify)

- 6) Does your institution have specific programs, initiatives, or strategies that promote diversity and inclusion?
 - a. Yes
 - b. No
 - i. If yes, please describe.

- 7) What is the total number of key performance indicators (KPIs) used by your department to measure the recruitment of current students and recent graduates to support the diverse workforce initiative? _____
- 8) On a scale from 1 to 5, how important do you rate the specific KPIs used to evaluate recruiting current students and recent graduates from diverse backgrounds?
1. Not at all important
 2. Slightly important
 3. Moderately important
 4. Very important
 5. Extremely important
- 9) On a scale from 1 to 5, please rate the level of importance your institution places on equity, diversity, and inclusion:
1. Not at all important
 2. Slightly important
 3. Moderately important
 4. Very important
 5. Extremely important
- 10) To what extent do you agree with the following statement: “The institution’s programs and practices lead to a significant increase in diversity and inclusion.”
- a. Strongly disagree
 - b. Disagree
 - c. Neither agree nor disagree
 - d. Agree
 - e. Strongly agree
- 11) On a scale of 1-5, how would you rate the effectiveness of your institution’s diverse workforce initiative?
1. Not at all effective
 2. Slightly effective
 3. Moderately effective
 4. Very effective
 5. Extremely effective
- 12) How frequently does your institution collect data on these metrics?
- a. Daily
 - b. Weekly
 - c. Monthly
 - d. Yearly

- 13) On a scale of 1-5, how accessible do you believe opportunities are for underrepresented groups in the DHS partnership at your institution?
1. Not at all accessible
 2. Slightly accessible
 3. Moderately accessible
 4. Very accessible
 5. Extremely accessible
- 14) Do you perceive the academic partnership with DHS positively influenced your institution's reputation?
- a. Yes
 - b. No
- 15) Have there been concerns or criticisms about your institution's academic partnership with DHS?
- a. Yes
 - b. No
- 16) Has your institution made changes or adjustments to the DHS partnership over time?
- a. Yes
 - b. No
- 17) Does your institution prioritize social equity in the DHS partnership?
- a. Yes
 - b. No
- 18) Does your institution engage community stakeholders to prioritize social equity in the DHS partnership?
- a. Yes
 - b. No
- 19) Does your institution have specific recruitment metrics for current students and recent graduates to support the diverse workforce initiative?
- a. Yes
 - b. No
- 20) Have your institution's academic programs been well-received by students and faculty?
- a. Yes
 - b. No

Appendix E: Interview Questions

- 1) Please describe your perception of the academic partnership with DHS and its impact on your institution.
- 2) What potential benefits and challenges does the academic partnership with DHS present for your institution and the larger community from your perspective as an academic administrator?
- 3) Please discuss any criticisms or concerns about the academic partnership with DHS and how your institution has responded to these concerns.
- 4) Based on your experiences, how do you envision the future of the academic partnership with DHS and your institution's role in it?
- 5) Please explain how your institution's programs or initiatives promote diversity and inclusion within the context of the DHS partnership.
- 6) What specific strategies does your institution employ to promote social equity in recruiting current students and recent graduates for the diverse workforce initiative?
- 7) Please share any best practices or innovative approaches your institution has implemented to support the diverse workforce initiative.
- 8) Please describe some of your institution's significant challenges in achieving the diverse workforce initiative and how you've addressed them.
- 9) Please provide examples of how your institution ensures equal access to opportunities for underrepresented groups in the DHS partnership.
- 10) Please describe in detail the process your institution uses to measure the success of its diverse workforce initiative and how these measurements might vary based on institutional size, type, and location.