



## ENTREPRENEURSHIP CENTERS: A QUALITATIVE STUDY ON THEIR MISSION, VISION, AND SUPPORT SERVICES FOR VETERAN ENTREPRENEURSHIP IN THE UNITED STATES

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### Abstract

This research evaluates how Entrepreneurship Centers (EC) function within veteran friendly Higher Educational Institutions (HEI) located in the United States (US) capital. It includes all 17 HEIs in Washington, DC. The region stands out because of its veteran population and unique combination of federal agencies, policymakers, HEIs and veteran support organizations. The study focuses on evaluating ECs' educational quality and effectiveness for veteran entrepreneurship promotion as well as determining their added value and impact on entrepreneurship initiatives. Content analysis was used to evaluate the operation of ECs in veteran friendly HEI systems through their mission and vision statements and their programs that support inclusion and entrepreneurial opportunities for veterans. Data collection and analysis involves initial reading

followed by open coding and thematic analysis of information from the university's website including ECs website and US Department of Education data. The research findings show that certain ECs at veteran friendly HEIs in Washington, DC offer comprehensive veteran support through programs that combine mentoring with financial assistance. Several ECs show minimal interest with little direct connection to veteran welfare.

**Key words:** Entrepreneurship Centers, Veteran Entrepreneurship, Higher Education, Qualitative Study, Thematic Analysis, Support Programs, Inclusive Education.

### Introduction

The expansion of Entrepreneurship Centers (ECs) throughout the United States (US) has grown exponentially during the past few decades, while Higher Education Institutions (HEIs) have become essential hubs for discovering entrepreneurial talent. Entrepreneurship is a fundamental driver for development and business creation throughout the US (Guzman & Stern, 2020). Research confirms that entrepreneurial activities create jobs while driving innovation and supporting regional and national economic growth (Maritz et al., 2016 -2022; Kelley et al., 2022). According to Pittaway (2020), University-based ECs play a strategic role in the entrepreneurial ecosystem by providing essential resources and educational support to aspiring entrepreneurs. These centers deliver crucial support services for student entrepreneurs and function as physical locations for teaching entrepreneurship, learning, and spreading entrepreneurial knowledge. Universities now consider Entrepreneurship Education (EE) essential in their curricula to equip students for the changing market ecosystems needing quick adaptability (Banha et al., 2022). Studies show that entrepreneurship development builds innovative analytical-thinking skills and the tenacity necessary for complex tasks such as oppor-

tunity identification and resource acquisition, which lead to production manufacturing and sustainable market creation (Bell & Bell, 2020). Therefore, the effectiveness of EE varies based on the teaching methods used and its delivery platform. Standard teaching-learning methods work alongside practice orientation with apprenticeships and activity-based learning to train students for entrepreneurial careers, according to Carpenter & Wilson (2022) and Solomon (2007b). Hence, EC at HEIs is responsible for imparting such educational experiences and offering incubation spaces, accelerators, and networks to support student entrepreneurial initiatives (Secundo et al., 2020). EC at HEIs is currently on the frontline in providing this learning style, undertaking specific courses, seminars, and coaching to create innovative professions and foster student ingenuity (Sim et al., 2021; Secundo et al., 2020).

Advanced technology and changing market conditions within the entrepreneurial field create additional challenges for military veterans as they enter civilian life (Maury et al., 2022). As we understand veteran entrepreneurs' difficulties transitioning to civilian business life, we understand the critical need to build an ecosystem that supports and empowers them. Various elements such as policies and regula-

tions, local resources, and cultural factors comprise this ecosystem, which plays a critical role in determining the entrepreneurial activity amongst veterans. Support for veteran entrepreneurs needs more than just recognition of their military service. Meaningful support requires personalized mentorship, specialized training, and access to key technology tools (Heinz et al., 2017). The ecosystem needs both organizational collaboration and resource information dissemination to function effectively—entrepreneurship benefits from sustainability and growth when policies across different levels of government support its development. Understanding how educational requirements for veterans evolve is crucial so HEI can properly adjust its entrepreneurship ecosystem at ECs to meet these needs.

This research study defines EE as a systematic effort to develop people according to specific guidelines that support enterprise creation and expansion. Yet ECs operate as essential conduits through which HEIs distribute knowledge and resources to boost veteran entrepreneurship development in the Washington, DC area.

Washington, DC, is the national center where federal veteran support and policymaking activities converge due to its diverse population and comparatively large demand of veterans possibly interested in business ventures in Washington, DC. The need to better understand how ECs implement their missions, visions, and programs to support veterans becomes essential due to their reliance on internal and external courses to enhance operational efficiency. The current knowledge about how ECs serve minor groups like vet-

erans who struggle with societal adaptation post-service remains limited even though veterans stand to gain significantly from appropriate entrepreneurial support (Montgomery et al., 2021).

This study explores ECs at all 17 HEIs in the context of this region. It identifies the presence of ECs in universities in Washington, DC. The qualitative study spans from June 14, 2023, to October 6, 2024, and gathers information from university and EC websites and data from the US Department of Education. The study analyzes how ECs at veteran-friendly HEIs in Washington, DC, match veteran students' needs by examining EC's mission and vision statements and the support services they offer veterans. Furthermore, this study examines the strategies these centers use to support minority students, including veterans in EE, and their role in advancing veteran entrepreneurship and economic empowerment. The hypothesis involves integrating veteran entrepreneurship ecosystems into ECs and involves center directors and policymakers in awareness initiatives to provide veteran entrepreneurs with essential support. The study findings will lay out the significant differences in the availability of these centers and offer suggestions for how ECs can take advantage of these variations to establish an entrepreneurship environment that supports veterans through diversity and inclusion. Hence, the entrepreneurial population can benefit from increased diversity and innovation, which supports economic growth (Deming et al., 2024; Kakouris & Liargovas, 2021; Imaroh, 2016).

## Literature Review

In recent years, entrepreneurship has become a significant power in the global economy as it drives innovation, job creation, and economic development in numerous sectors (Kelley et al., 2022). Due to these benefits, EE has witnessed substantial growth in the US, signifying its role as a driver of innovation and economic progress. This literature review focuses on EE and ECs in support of veterans.

### *Entrepreneurship Education (EE)*

Entrepreneurship has become one area of focus within HEIs and is used to create a pool of students with the right attitudes and expertise needed for business ventures. It goes further than traditional business training by focusing on building creativity, innovation, and the capacity to handle risk (Bell & Bell, 2020). It helps students develop intentions towards entrepreneurship, innovate, and begin new ventures; it also helps them explore like entrepreneurs in their professions no matter the specialization they undertake (Banha et al., 2022). Therefore, the pedagogy of EE has come to the forefront as a tool to improve employment and economic development (Maritz et al., 2016 – 2022; Kakouris & Liargovas, 2021).

The experiential learning model has become a prominent trend in EE to enable student interaction with real business settings, as shown by recent studies (Carpenter & Wilson, 2022; Winborg & Hägg, 2022; Yong, 2022; Bell & Bell, 2020; Morris, 2019; Solomon, 2007b). The teaching method is essential because it connects students' theoretical knowledge to real-world events, which enhances their

learning experience. According to current research findings, modern teaching methods like case studies, internships, and interactions with successful entrepreneurs have proven to be the most efficient way of connecting theoretical concepts with practical applications (Boldureanu et al., 2020).

Through these activities, the student gains essential entrepreneurial skills like opportunity recognition and risk management.

The theories and practices of EE remain crucial because they blend psychology, business, economics, and educational elements. According to Boldureanu et al. (2020), Human Capital Theory proposes that EE development enhances individuals' skills, which helps them find opportunities and run businesses more effectively. David Kolb's book *Innovation with Experiential Learning Theory* shows how business plan competitions and internships develop student abilities in innovation alongside risk-taking and persistence, according to Morris (2019). Bell & Bell's 2020 research into experiential learning presents Kolb's Experiential Learning Theory as a comprehensive structure that explains how experiences facilitate learning through reflection and practical application. On the other hand, the Effectuation Theory by Saras Sarasvathy shows entrepreneurs focus on resources and adapt to unexpected conditions instead of planning ahead, according to Ji et al. (2019). Modern EE has expanded beyond business plan concepts to include design thinking strategies, lean startup approaches, and creative competencies. Understanding entrepreneurship challenges builds innovative frameworks that drive economic development and helps indi-

viduals create and maintain successful businesses.

Another critical component of developing EE is creating an entrepreneurial ecosystem at HEIs, promoting cooperation and communication between students, academics, and industry. This ecosystem approach is vital for fostering the environment that far-sighted entrepreneurial individuals, teams, and other interest groups would need to exchange ideas and access difficult-to-come-by resources that may otherwise be difficult to acquire due to individual effort alone (Maritz et al., 2016 - 2022; Eesley & Lee, 2021). In this regard, ECs have a central role as intermediaries for individuals, as well as sources of mentorship and funding and providers of relevant business resources. Such ecosystems enrich learning and significantly increase the chances of establishing successful ventures, as such environments provide an all-encompassing ecosystem that incubates entrepreneurial intent at different stages of ideation and implementation (Pittaway et al., 2020).

Another aspect supporting EE is flexibility – the capacity of EE to adjust to society and the economy (Banha et al., 2022; Imaroh, 2016). Recent years have witnessed initiatives to boost the numbers of entrepreneurs from diverse backgrounds, including women and minorities along with veterans, according to Deming et al. (2024). The transition to more diverse entrepreneurship happens because different perspectives generate improved solutions that drive entrepreneurship inclusion, which remains crucial for sustainable economic growth (Ratten & Usmanij, 2021). Higher education plays a crucial role in cultivating en-

trepreneurial abilities in veterans. The transition processes for student veterans require more profound research and understanding from scholars and policymakers to tackle issues like low bachelor's degree completion rates and high dropout numbers (Jenner, 2017), along with understanding financial planning needs during higher education transitions for veterans (Ziencik, 2020). Cumberland et al.'s (2020) research on veteran-focused entrepreneurial training programs indicates that customized educational programs aid their career goals. Their research identifies variables that impact entrepreneurial intentions during tough economic times and emphasizes the critical role of educational support in entrepreneurship development. Therefore, HEIs can use available resources and support mechanisms to help veterans build entrepreneurial skills while strengthening their business initiatives.

The effectiveness of EE remains a topic of discussion because researchers are still working to identify which indicators surpass traditional business success metrics to measure entrepreneurial learning benefits. Resolving these challenges demands collaborative efforts from educators, policymakers, and the corporate world to enable EE to meet both student and societal needs.

#### *Entrepreneurship Centers (ECs)*

ECs at HEIs serve as strategic hubs that develop new concepts while delivering resources essential for venture growth. These centers supply entrepreneurial resources and assistance to students, alums, and faculty members so they can develop their business ventures into sustainable enterprises

(Secundo et al., 2020; Jones et al., 2018). ECs assist entrepreneurs through specialized methods such as business plan competitions and startup accelerators, which help cultivate ingenuity and an innovative mindset. Furthermore, ECs play an essential role in developing creative thinking, teamwork, and practical experience. Jones et al. (2018) revealed that such centers are catalysts for ingenuity while nurturing students' distinct culture of innovation and problem-solving skills. Secundo et al. (2020) found that building networks between students and entrepreneurial ecosystem stakeholders in strongly developed educational programs are essential for teaching students entrepreneurial skills and mindsets. The study demonstrates how these ECs create entrepreneurial culture while offering actionable guidance for developing and managing corresponding programs through stakeholder partnerships. Thus, building connections between students and industry professionals establishes a collaborative environment focused on knowledge exchange that helps develop a sustainable entrepreneurial ecosystem (Kelley et al., 2022; Maury et al., 2022). The networking dynamic allows students to gain industry knowledge while building essential contacts for their upcoming professional activities.

These ECs significantly influence economic development in both local and global communities through job creation platforms and economic growth enhancement. At the same time, they cultivate a persistent entrepreneurial culture through innovation promotion (Secundo et al., 2020). The essential characteristic of ECs is innovation because it is a strategic competi-

tive benefit for firms (Jones et al., 2018). Entrepreneurs receive continuous support from ECs through various services and resources, according to Sim et al. (2021). Support services from ECs include physical workspaces, business advisory services, financial services, and technology-aligning services and resources for incubators. Additional connection methods drive new business establishment and growth (Eesley & Lee, 2021). ECs provide mentorship programs that connect new business owners with established business experts to receive comprehensive advice on market trends and business expansion (Jones et al., 2018). This support becomes indispensable to university students and business owners because it merges their theoretical learning with practical application to equip them for corporate management challenges. ECs influence broader socioeconomic growth and contribute to regional economic development while building an innovative entrepreneurial ecosystem beyond their support to individual business owners, according to Jones et al. (2018).

While entrepreneurs benefit from support from ECs, veterans encounter distinct obstacles throughout their entrepreneurial journeys. The leadership problem-solving and decision-making abilities veterans obtain from military service represent their most common skills (Hunnicutt, 2022; Maury et al., 2022-2023). These attributes give veterans meaningful benefits when starting a business, particularly when facing high-risk situations that require flexible decision-making and innovative planning. However, veterans sometimes face multiple challenges when entering the entrepreneurship sector. For instance, veterans often

struggle to transition their military skills into civilian business enterprises because they lack an understanding of the business world and face difficulties both in securing business financing and applying their military training to generate effective business solutions (Maury et al., 2022-2023; Sankaran and Battisto, 2018). The main concern that shapes many veterans' lives involves transitioning from military service to starting a business. Sankaran & Battisto (2018) explore the obstacles veterans face due to limited credit history and subpar credit scores. Their research shows how these factors result in increased credit denial rates among veterans. The struggles veterans face include proper management of funds and insufficient access to credit. The ECs can address these challenges through specially designed support programs for veterans. ECs can connect veterans to suitable Veteran Centers and funding sources that promote entrepreneurial ventures for veterans. The study by Maury et al. in 2022 examines how ECs connect veterans to suitable Veteran Centers and funding sources to advance entrepreneurial ventures for veterans. The study shows that some ECs work with government agencies to obtain grants and loans for veterans, resulting in a broader range of funding options. The partnership seeks to improve support mechanisms for veteran business owners while expanding their access to essential resources.

### Methodology

This study uses qualitative research through content analysis to systematically examine the mission, vision, and support programs of veteran-friendly HEIs' ECs in Washington,

DC. Text analysis proves essential for evaluating textual information because this method uncovers hidden patterns within texts and the intentions behind an author's work (Ji et al., 2019). This study conducts a qualitative examination of how ECs at veteran-friendly HEIs justify and support minority students, including veterans, in their public documents, including university websites, and EC websites, and other online materials.

The study identifies how these institutions implement inclusivity and veteran support through mission and vision statements and particular support program details. The research included all 17 HEIs in Washington, DC. The designation shows that these HEIs host veteran students at their campuses. The participatory data includes the institution's mission and vision statements, and descriptions of general support programs that assist minority student groups, including veterans. A thorough content analysis strengthens access to this large and detailed dataset. The US Department of Education college navigator tool and Integrated Postsecondary Education Data System (IPEDS) provided details about universities and their veteran student populations. Table 1 presents data on all 17 HEIs in Washington, DC, showing their EC programs and the number of veteran students' population at each HEI. The current literature reveals how HEIs develop EE programs and how ECs tailor their entrepreneurship support to serve particular groups like veterans. The review identifies support programs ECs can establish to boost veteran entrepreneurship. A criterion was developed to evaluate the presence of support programs at the 6 ECs. These cri-

teria include any of the following support programs: EE

Table 1: Veteran-Friendly HEIs in Washington, DC.

<b>Name of the University</b>	<b>Entrepreneurship Center (Yes/No)</b>	<b>Number of Veteran students reported by NCES 2023-2024 (Recipients of Post-9/11 GI Bill Benefits - Undergraduates &amp; Graduates)</b>
American University	Yes	356
Gallaudet University	Yes	6
George Washington University	Yes	892
Georgetown University	Yes	769
Howard University	Yes	254
The Catholic University of America	Yes	89
Institute of World Politics	No	21
NewU University	No	-
Pontifical Faculty of the Immaculate Conception at the Dominican House of Studies	No	-
Pontifical John Paul II Institute for Studies on Marriage and Family	No	1
Strayer University-District of Columbia	No	21
Strayer University-Global Region	No	398
The Chicago School at Washington DC	No	11
Trinity Washington University	No	22
University of the District of Columbia	No	46
University of the Potomac-Washington DC	No	27
Wesley Theological Seminary	No	17

Courses, Incubators, Strategic Partnerships, Experimental Learning opportunities, Access to Entrepreneurial Networks, Mentorship services, Ventures and Startup Funding Opportunities, Accelerators, and Pitch Competitions.

Our data evaluation process relied on coding and thematic analysis techniques. Qualitative researchers often use this standard procedure to identify themes within their data. The coding process involves three core phases. During the data analysis procedure, three essential phases occur: open coding followed by axial coding, leading to selective coding.

In open coding, the entire text was read line by line to explore keywords, expressions, and concepts regarding the veteran support in the mission and vision statements and the support program descriptions to establish common concepts and the corresponding use of keywords. In the same stage, initial text segmentation and annotation procedures started, and each text segment was coded.

Following open coding, we conducted axial coding to generate more precise categories from the themes established during open coding. Axial coding involves linking initial codes to generate distinct categories for specific data collection interests. We organized the initial themes into broader categories during this phase. This step helped resolve correlations among themes and created an integrated system to understand better how entrepreneurship centers' missions, visions, and programs connect. The process revealed how the missions and visions of entrepreneur-

ship centers connect with their support programs, mainly through veteran support and entrepreneurial skill development.

Selective coding served to merge every code into the thematic framework. The coding technique identified the main categories in the analyzed specimens representing the studied phenomenon about the role of ECs for minority populations like veterans. This process included a category review so researchers could understand how selected themes represented the missions, visions, and support programs of the ECs. The final themes were organized to describe the recognized way ECs help improve EE for minority student groups like veterans. The identified themes in this phase were:

- Diversity and Inclusion.
- Community Engagement and Development.
- Entrepreneurial Support Structures and Education.

The process established connections between the mission and vision statements and the support programs of multiple ECs while focusing on veteran support and entrepreneurial skill development. Table 2 displays the three primary phases of thematic analysis, which include open, axial, and selective coding while showing how keywords from the support programs were carefully chosen from the American University—Veloric Center for Entrepreneurship. The table demonstrates the coding process, which organized initial codes into broader themes.

Table 2: A Sample Analysis of Support Programs offered at American University -  
 Veloric Center for Entrepreneurship.

<b>Keyword</b>	<b>Initial Codes (Open Coding)</b>	<b>Categories (Axial Coding)</b>	<b>Broader Themes</b>
Incubators	Business Support Systems	Structured Learning	Entrepreneurial Support Structures and Education
Strategic Partnership	Collaborative Relationships	Institutional Support	Community Engagement and Development
Local Government	Public Sector Support	Institutional Support	Community Engagement and Development
International Government	Global Support	Institutional Support	Community Engagement and Development
Private Enterprises	Business Collaborations	Institutional Support	Community Engagement and Development
Non-Profits	Community-Focused Organizations	Institutional Support	Community Engagement and Development
Think Tanks	Knowledge Hubs	Community Engagement	Community Engagement and Development
Entrepreneurial Networks	Professional Connections	Community Engagement	Community Engagement and Development
Ventures	Business Endeavors	New Business Development	Entrepreneurial Support Structures and Education
Minorities	Underrepresented Groups	Diversity and Inclusion	Diversity and Inclusion
Veterans	Experienced Individuals	Diversity and Inclusion	Diversity and Inclusion
Women	Gender Representation	Diversity and Inclusion	Diversity and Inclusion
Deaf and Hard of Hearing	Accessible Resources	Diversity and Inclusion	Diversity and Inclusion

Figure 1 summarizes the research design employed in this study. It includes military veterans based in Washington, DC, who strive for entrepreneurial success through support from ECs. This study explores how

ECs at veteran-friendly HEIs promote policies that demonstrate support for minority students, including veterans, through public documents, including university websites and EC websites. The research gathered information

about the mission and vision statements of ECs and the support programs they provide. Thematic analysis was conducted through open coding followed by axial coding and selective coding, which revealed three distinct themes: Diversity and Inclusion alongside Community Engagement and Development, and Entrepreneurial Support Structures and Education. The research incorporated a theoretical framework to include Human Capital Theory, Innovation with Experiential Learning Theory, and Effectuation Theory from existing literature to support the influence of ECs on creating veteran-specific entrepreneurial ecosystems.

### Findings

This section highlights veteran student needs and presents the content analysis findings related to the mission statements, visions, and support programs of veteran-friendly HEIs in Washington, DC. The research identified commonalities and distinctions in how veteran-focused entrepreneurial assistance was provided by different ECs.

The veteran student enrollment numbers at each of the 17 HEIs reflect the differences in promotional and recruiting efforts across these institutions. 6 of the 17 HEIs have established an EC, and 15 of the 17 HEIs have been designated as veteran-friendly institutions due to the number of veterans enrolled in these institutions. Table 1 shows that HEIs with completely developed ECs have the most significant number of enrolled veterans at these HEIs. Furthermore, after carefully examining the content and data gathered for this study, the

analysis shows substantial differences among the ECs regarding mission and vision statements and support programs. The 6 ECs work toward developing an entrepreneurial environment that supports innovation and inclusivity to nurture veteran entrepreneurs. However, certain universities provide extensive programming to serve veterans as part of their support for minority groups, while others offer limited support and programs for veterans. The findings from the study show that mission and vision statements, and provided programs need extensive coverage of veteran support. Out of the 6 ECs, the American University (Veloric Center for Entrepreneurship) is the only center that used the term "Veteran" in support programs without mentioning it in its mission or vision statement. The other 5 EC's (Gallaudet University – GIEI, Georgetown University – Georgetown Entrepreneurship, Howard University – PNC National Center for Entrepreneurship, and The Catholic University of America – The Ciocca Center for Principled Entrepreneurship) specified other minority groups within their mission/vision statements or support programs. The results for each EC, as presented in Table 3, clearly emphasize minority and veteran groups. Specific centers worked to boost minority representation in entrepreneurship through specialized programming for women (e.g., Georgetown University Initiative) and

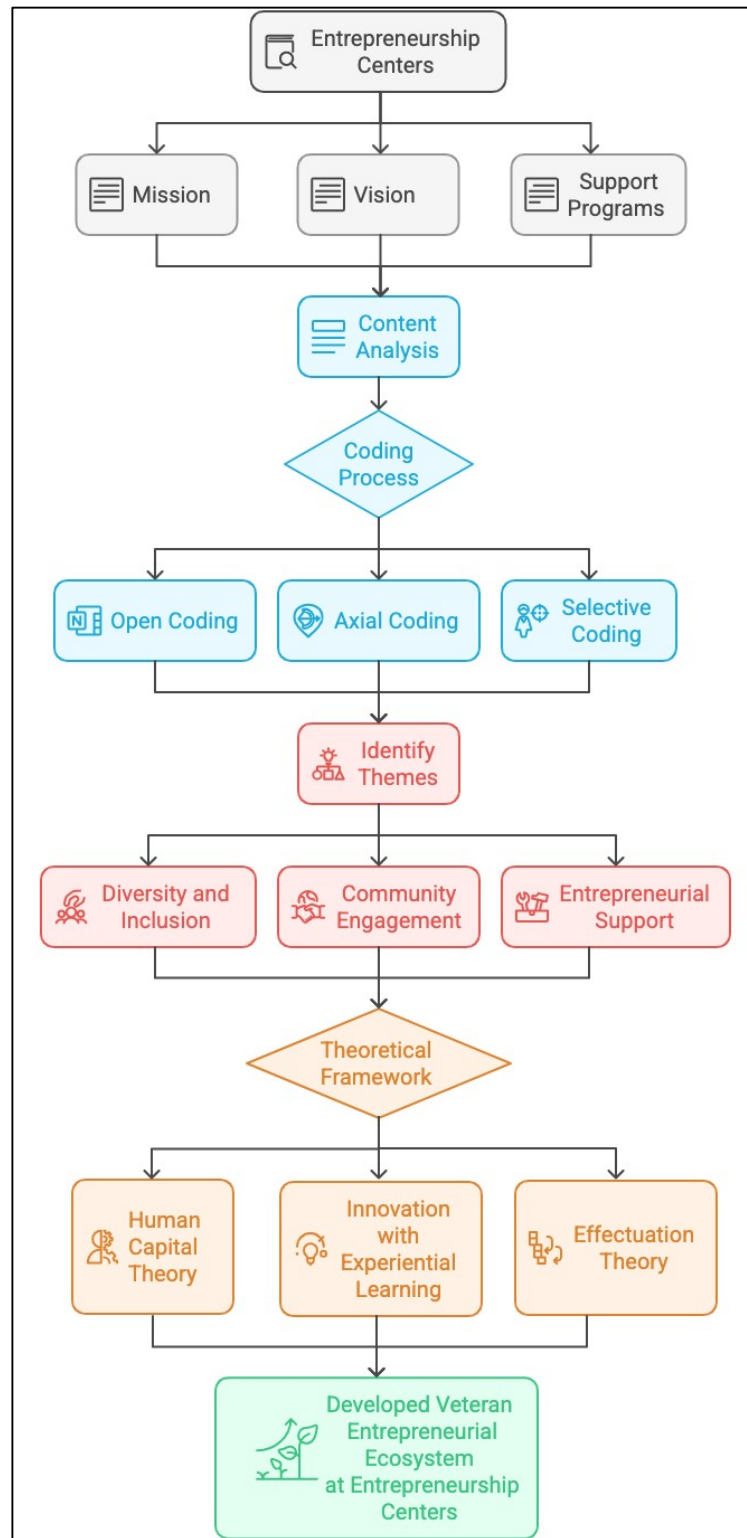


Figure 1: Research Design Employed in this Study.

Table 3: Findings at each HEI EC in Washington, DC.

Higher Education Institution	Mention of Veterans in the Mission or Vision Statement or support programs	Mention of Minority Groups in the Mission or Vision Statement or support programs	Details
American University - Veloric Center for Entrepreneurship	Yes	Yes	Veloric Center for Entrepreneurship highlights veterans and minorities in support programs only. Emphasizes a diverse student body in its venture programs like "Canvas Wear," which supports veterans, "Fem Equity," which supports women, and "Sign-Speak," which help deaf and hard hearing. Also, the university is committed to supporting veterans through its dedicated Veterans Services Office (VSO) and Student Veterans of America (SVA), known as AU Veterans, a student veteran origination.
Gallaudet University - Gallaudet Innovation and Entrepreneurship Institute (GIEI)	No	Yes	GIEI doesn't specifically mention information about veterans in the mission vision statement or support programs. However, GIEI specifically targets the deaf and hard-of-hearing community to enhance entrepreneurial skills.
George Washington University - The Office of Innovation & Entrepreneurship (OIE)	No	No	OIE doesn't specifically highlight veterans or minorities in its mission, vision statement, or support programs. However, the university is committed to diversity and inclusion, and the OIE is likely aligned with these values. The University is also committed to supporting veterans through its dedicated Military and Veteran Service (MVS) office and Student Veterans of America (SVA), also known as GW Veterans.
Georgetown University – Georgetown Entrepreneurship	No	Yes	Georgetown Entrepreneurship Initiative does not explicitly mention information about veterans in the mission or vision statement or any support programs. However, it highlights minority groups like women in its support programs. Also, Georgetown University as a whole is committed to supporting military-connected students through the Military and Veterans' Resource Center (MAVRC) and Georgetown University Student Veterans Association (GUSVA).
Howard University - PNC National Center for Entrepreneurship	No	Yes	PNC National Center for Entrepreneurship at Howard University doesn't specifically mention information about veterans in its mission or vision statement or any support programs. However, the center is dedicated to enhancing EE and empowering minority

			entrepreneurs, particularly those from the Black community entrepreneurs, which may also include resources that could benefit veterans. Also, the university is committed to supporting veterans through its dedicated Office of Military and Veterans Services (OMVS).
The Catholic University of America - The Ciocca Center for Principled Entrepreneurship	No	Yes	Ciocca Center for Principled Entrepreneurship doesn't specifically mention information about veterans in the mission or vision statement or any support programs. However, the center aligns its inclusivity efforts with Catholic education and ethical teachings. Moreover, the University is committed to supporting veterans through its dedicated Military and Veteran Student Services (OMVSS) office and CUA Homefront, a student organization for military-affiliated populations.

African American students (e.g., Howard University EC). The other ECs implemented inclusive approaches to support different minority groups without addressing their specific needs. Targeted programs at Gallaudet University and the Catholic University of America served deaf students and Catholic students, respectively. These programs represented effective ways to meet the needs of specific minority populations.

In the 6 ECs considered in this study, three themes were identified in how the ECs served the needs of minority student groups, including veterans. These themes specify similarities in their conception of EE and conspicuous differences in the perceived degree of direct support available to veterans. The most recurrent theme in all the analyzed ECs was a general focus on Diversity and Inclusion. The use of language such as "Veterans," "Women," "African American," and "Deaf/Hard of Hearing" in the mission or vision statement or support programs underscores the focus and spe-

cialized learning of entrepreneurial skills to intended and capable minority and underprivileged students. This attention to representation indicates that veterans and other minorities are specified in these EC's mission, vision statement, or support programs. However, one misstep could be observed when the EC did not specifically mention information about veteran or minority groups in their mission, vision, or support programs. However, the university as a whole is committed to diversity and inclusion.

Another identified theme was Community Engagement and Development, where ECs focused on cultivating a solid association between the university ECs and the community. This incorporates local and foreign governments, private enterprises, non-profit originations, and alumni to promote entrepreneurship as a source of socioeconomic transformation. Thus, the requirement to emphasize entrepreneurial skill development is especially appropriate for veterans with experience accumulated during their

military service. It is vital to veterans who want to continue serving their communities in novel ways.

We also determined a theme that identified the degree of Entrepreneurial Support Structures and Education for students, including minority groups like veterans. These activities included workshops, experimental learning, competitions, venture development, startup creation, customized entrepreneurial training, mentorship programs led by other experienced businessmen, and skillful tips to ameliorate a business and arrange its funding.

Figure 2 shows how the relevance of these ECs varies in terms of their efficacy in fulfilling veterans' entrepreneurial requirements. American University demonstrates veteran support with venture program initiatives for veterans. On the other hand, EC at Gallaudet University, George Washington University, Georgetown University, Howard University, and The Catholic University of America have exhibited their resolve to minority support and inclusive entrepreneurship. Hence, these HEIs can further improve their processes regarding veteran-specific programs at their ECs.

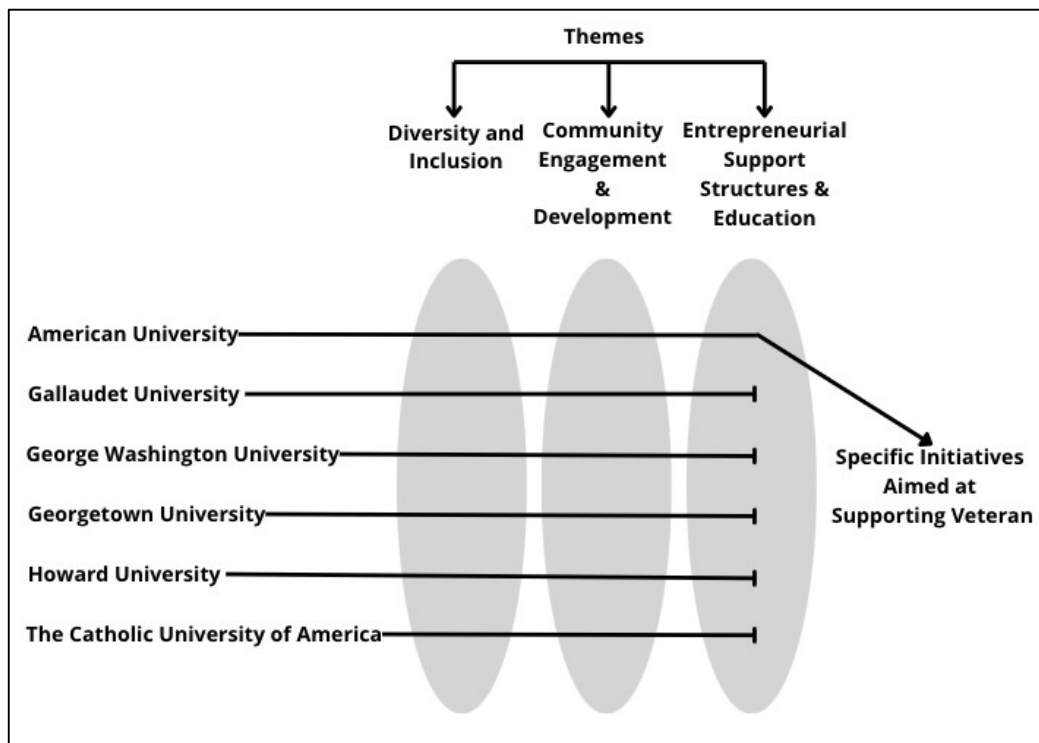


Figure 2: Broader Themes at HEI EC's in Washington, DC.

## Discussion

A strong point of the study is its focus on the qualitative content analysis of the mission and vision statements and its support programs at ECs at veteran-friendly HEIs in Washington, DC. The distinctive geographic focus on Washington, DC, as the national capital, creates unusual veteran service environments because multiple federal veteran support services are concentrated in this region. Furthermore, proximity to federal policymakers allows researchers to monitor policy implementation directly. The unique combination of the above elements makes Washington, DC, an ideal research setting for studies with national influence. The research provides detailed information about the operation of ECs to support veterans and minority groups. This research provides a local perspective on how ECs at HEIs in Washington, DC, align their goals with veteran-specific needs by examining 17 veteran-friendly HEIs and the 6 among them that offer entrepreneurship programs to support minority and veteran entrepreneurs.

Research findings reveal successes and challenges as ECs from multiple HEIs support veteran entrepreneurship in Washington, DC. The results show that ECs deliver services to diverse populations, but only select ones concentrate on veterans. Some universities might create diversity programs that overlook the difficult transition veterans face from military to civilian life and entrepreneurship. Montgomery et al. (2021) found that universities fail to address veteran barriers to academic success and entrepreneurial activity because they do not provide the necessary support systems. HEIs

need to develop specialized methods to support veterans, according to Ziencik (2020), because their programs and services must become both inclusive and reflective of veterans' needs. Maury et al. (2022-2023) highlight that veteran entrepreneurs require specialized support systems and more profound knowledge to overcome their unique challenges and increase their success rates. ECs, such as American University in Washington, DC, have started development to meet veteran demands. However, additional ECs in Washington, DC, should integrate veteran needs into their mission and vision statements. Institutions need to create complete support systems that are customized specifically for veterans.

Research results match existing literature on EE for veterans and minority groups at HEIs and highlight the need for specialized support that addresses their specific challenges (Heinz et al., 2017). The existing literature presents several theoretical frameworks, which include Human Capital Theory, Innovation with Experiential Learning Theory, and Effectuation Theory. These theoretical frameworks enable a strong foundation to understand and develop EE while constructing an entrepreneurial ecosystem at veteran-supportive HEIs that reveals opportunities for veterans at ECs. According to Thomassen et al. (2020), researchers must analyze theoretical frameworks and the contextual elements from literature to understand how context can be adapted and designed within EE. Academic literature on EE suggests universities are essential platforms for promoting innovative thinking, leadership skills, and entrepreneurial prospects among underrep-

resented groups, including veterans. Deming et al. (2024) and Cumberland et al. (2020) point out that special veteran support services are necessary. The current study verifies this through observed connections between support services and program outcomes. Research indicates that creating intervention programs tailored to veterans will help them overcome obstacles, including education funding, entrepreneurship training, and social reintegration. When results are interpreted through the EE framework for veterans, positive measures become evident. Maury et al. (2022) call for the collaboration of various stakeholders to establish effective programs that tackle this particular requirement to enhance veterans' entrepreneurial success. Program improvements for veterans remain ongoing work and have not yet achieved their full potential.

The study found that ECs need to build practical ecosystems that enable equality, which should focus on employing qualified learners who show motivation, including veterans and minority groups. Through the analysis of 6 ECs, multiple themes emerged that focused on their mission, vision statements, and support programs. The 6 ECs focused on Diversity and Inclusion along with Community Engagement and Development, as well as Entrepreneurial Support Structures and Education. Out of the 6 ECs evaluated, only 1 meets the criteria for supporting veterans, though all aim to uphold diversity principles. Although HEIs in Washington, DC, have acknowledged the importance of diversity and inclusion initiatives, they lack specific objectives to support veteran populations.

Data from EC websites, including mission and vision statements and program descriptions, demonstrate limited methods HEIs and ECs employ to support veteran entrepreneurs. The study faces a limitation because it does not have direct data from subjects like veteran students, which prevents in-depth analysis. This study is conducted based on the institution's perspective. Future research should implement interviews or questionnaires with veterans to better understand their experiences. A strength of this research is its focus on a particular population, like veterans. However, the study's scope remains limited because HEI websites may contain incomplete information when retrieving data for ECs. Another limitation of this study is that it does not sufficiently examine different geographic areas and environments. The ECs require further detailed analysis at the regional level despite national studies providing basic knowledge about veteran support systems. The absence of regional analysis is significant given the unique interactions between federal policymakers, HEIs, and veteran support organizations within Washington, DC. Existing studies have yet to adequately examine the relationship between veteran EE and success and the concentration of federal resources and support services.

The study provides recommendations for policymakers and minority students, including veterans, and demonstrates that its findings support entrepreneurship programs that must accommodate their specific situations. HEIs need to enhance their mission and vision statements since they lack direct focus on veteran students. The strategies created by ECs must reflect veteran students' needs while address-

ing their challenges according to existing research. EC's that offer entrepreneurship programs, workshops, and mentorship enable veteran students to fully develop their entrepreneurial skills and learn the best methods to apply their business expertise in corporate settings. According to Hunnicutt (2022), such initiatives enable veterans to use their entrepreneurial abilities to transition into corporate roles while improving their education outcomes and career opportunities, which helps connect military experience with civilian career paths. Other institutions seeking to diversify entrepreneurial ecosystems can use increased veteran student representation and support within ECs as a model (Secundo et al., 2020). Providing ECs with subsidies to establish distinctive veteran programs will significantly improve the availability of entrepreneurship support systems for minority veteran students. Therefore, Veterans should target ECs, which deliver resources and support for minorities, because these institutions are more likely to create programs that support such students. Veterans need explicit support through mentorship programs, funding, and training initiatives designed specifically for them. Without access to these specific programs, military veterans will encounter difficulties in integrating their military skills with entrepreneurial ventures. The situation demonstrates a need to initiate enhanced requests for sensitive representation and targeted specialization programs in the EC's framework.

### Conclusion

This study examined how ECs at all 17 HEIs in Washington, DC, support veteran students through their

mission and vision statements and support services. Washington, DC, was chosen for this research area because federal agencies, policymakers, HEIs, and veteran support services exist in one geographic location. These combined elements establish Washington, DC, as an ideal research environment for studies that will have national effects. Within Washington, DC, 15 out of the 17 HEIs were found to be veteran-friendly HEIs, and only 6 of the 17 HEIs were found to have an established EC. The research conducted qualitative content analysis on the 6 ECs as representative samples to determine their potential in supporting veteran entrepreneurship and identify the gap between their goals and veteran entrepreneurs' needs. The existing literature reveals crucial implications and theoretical frameworks that provide important lessons to help ECs assist veterans in their entrepreneurial transition. The study findings indicate that HEIs with completely developed ECs have the most significant number of enrolled veterans.

Furthermore, the study indicates that support levels and resources available at ECs in Washington, DC, show variation between institutions, and some ECs have developed advanced veteran-friendly policies because certain ECs offer veterans more support than others. Out of the 6 ECs evaluated, only 1 meets the criteria for supporting veterans through their program. The shift course corresponds with widespread challenges in EE. The research findings aim to provide valuable insights for academic researchers, HEIs, policymakers, and veterans. The study findings suggest that policymakers in HEIs should establish policies enabling ECs to create comprehensive support systems for veterans' entrepre-

neurial endeavors. Future studies should look into longitudinal empirical research about the effects of these centers on veteran entrepreneurship across different demographic areas. Finally, HEIs can significantly advance their ECs for veterans through the implementation of specific programs and by modifying their mission or vision statements alongside partnerships with veteran organizations.

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