

Charlottesville Economic Initiative

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

There is an enormous amount of motivation in universities across the globe today to provide economic aid not only to students and faculty, but also to surrounding populations. Whether through emerging technology, humanitarian relief, or community engagement, there is a resolute will to promote equitable opportunities. However, these projects are only valuable and long-lasting if they can be properly utilized by the entities they seek to benefit. Many projects, technologies, and funds have been claimed as being recklessly dished out without fully recognizing the target audiences' values and beliefs (Carriere, 2008). The intentions may be goodhearted, but the result is not always optimal. Yet, whether it being underrepresented peers in the neighborhood or small-businesses without sufficient resource accessibility, many state colleges and universities around the world have the capacity at their fingertips to incite change for the better and without waste. The lingering question remains to be investigated: how can university led initiatives be optimized to foster economic opportunities in the surrounding communities? Through an Actor-Network Theory (ANT) framework in conjunction with past research on university sponsored projects, this thesis seeks to collect data and identify how universities can interact with local economies to provide economic aid and growth. This paper first includes a conceptual discussion about the animating role that universities play in local economics, and is followed by a series of examples in which universities have attempted this role of catalyst. These sections serve as background for an evaluation of the current resources and institutions at the University of Virginia that attempt to drive local, economic development.

Literature Review

Universities are Economic Catalysts

With the goal of understanding the process into how university led initiatives can promote economic development in their surrounding communities, one must first grasp why universities are a center for financial literacy improvement, and how the university resources at hand can extend to the local economies. Thomas L. Harnisch (2010) dives into this topic at hand in his *Boosting Financial Literacy in America: A Role for State Colleges and Universities*. In this piece, Harnisch emphasizes the growing, American concern of financial illiteracy, defined as “the ability to make informed judgements and take effective actions regarding the current and future use and management of money” (p. 1). The author proposes a new approach to this widespread issue that involves weaving financial literacy programs and services into state colleges and universities. The idea rests on the experience and leadership of the students at these institutions. In order to justify the claim that universities are a center for financial learning, Harnisch cites data that suggests the involvement of students with economic concepts, such as the rise in student debt over the years, the increase in employment among full-time college students, and the overall exposure to financial independence.

The stance proceeds by advocating these basic economic concepts are associated with an improved “health and well-being of individuals, families, communities, and markets” (p. 3). Not to mention, the campus community has access to opportunities such as financial literacy programs directed by faculty and staff, economic integrated curriculums, and financial counseling teams via financial aid and/or private student loans. In short, Harnisch suggests the best place to establish a center for economic development resides at the university or post-secondary school level. After establishing this theme, the audience is briefly introduced to the

student and faculty-led activities directed towards the wider community. However, there never reaches a dissection into how these activities may succeed or fail. Thomas L. Harnisch's article leaves the conversation open to readers. How might the local economy capitalize on these university led initiatives, and what are the commonalities of succeeding and failing initiatives?

Mississippi State University

Before ultimately examining the initiatives at the University of Virginia (UVA), it is appropriate to examine several case studies at other institutions, such as Mississippi State University (MSU). In 1914, the Smith-Lever Act established the Cooperative Extension Service, a nationwide endeavor to boost the educational system through land-grant universities, like MSU (Long, 2006). As the Extension has evolved its goals in Mississippi over time, the program has most recently been referred to as the MSU Extension Center for Economic Education and Financial Literacy (ECEEFL). While once focused on improving academic enrollment in Mississippi, ECEEFL now promotes economic development in the surrounding 82 counties (Long, 2006). Over the years, ECEEFL has offered professional learning in economics, finance, and entrepreneurship; public research and analysis on the economic well-being of Mississippi; and public dialogues for community members to voice concerns. In addition, the ECEEFL prides themselves on age-impartiality by welcoming students and teachers of all grades to utilize the opportunities at hand. At the MSU Extension, these university-led initiatives have found their 100 years of success via open communication and inclusion. Through facilitating public forums, the Extension has welcomed feedback from Mississippians that can be used to refine the scope of the endeavor. Plus, the emphasis on age-impartiality not only provides a larger pool of Mississippi to take advantage of the program, but more notably doesn't refuse service to anyone.

The tenets from this case reveal a successful university initiative that emphasizes an open and iterative process in order to foster economic improvement in surrounding communities.

University of Michigan & Michigan State University

Nonetheless, there are many other methods of economic development than financial education and support. At the University of Michigan (UM), the UM-Flint EDA University Center for Community and Economic Development contributes to the cause through efforts that cultivate advice and opportunities for small-businesses. At its counterpart, Michigan State University furthers this endeavor with a similar chapter of its own (Garlow & Walling, 2014). At both chapters, the EDA conducts and disseminates research similarly to that of the MSU Extension, but also provides tools, websites, and portals that promote innovation and entrepreneurship to local small-business owners. Through technology “workshops, seminars, and business bootcamps,” the UM-Flint chapter distributes its personal, expensive resources to the surrounding community to expand their business ideas (UM-Flint EDA, n.d.). Here, university led initiatives maintain a sense of community when developing goals in the surrounding economy. With as much as 55% of small-businesses around the United States failing within the first five years of inception, some state universities and colleges have the resources at their disposal to help jumpstart entrepreneurs, and improve the overall economic well-being in nearby areas (Dodge & Robbins, 1992).

East Carolina University

East Carolina University (ECU) responds similarly to its respective communities through its Project HEART. This student-faculty led initiative seeks to provide university-level tutoring

to underachieving K-12 school students in risk of dropout or failure (McFadden, 2009). Warren and Lee (2003) show the relationship between adolescent employment and high school dropout rates consistently reflects a negative correlation. This relationship suggests a point of intervention in supporting K-12 education as it relates to economic development. Programs that emphasize and guide students towards a high school degree can advance the labor-market in their surrounding communities. While the conversation immediately swings back to intervention through education, Project HEART's case reveals progress derived from its mission focus. ECU employs its advanced resources in an attempt to reduce the dropout rate in nearby communities. Project HEART identifies a specific population in need of economic development, and executes. Though these three universities possess very different motives for their endeavors, these cases suggest that successful university initiatives within local economies are iterative, accessible, and focused.

The Framework & Methodology

The previously cited literature and cases expose a common struggle to incorporate all relevant stakeholders. Whether discussing Project HEART's ability to reach as many underachieving K-12 students in the community or UM-Flint EDA's inventory of technologies available to hopeful businesses, there is a consistent area for improvement on relationships between all human and non-human elements. The common theme in all these cases suggest the Actor-Network Theory (ANT) is a promising, conceptual framework to evaluate and understand how university-led initiatives address all pieces of the puzzle. In an exploration of the social, ethical, and political issues surrounding gene patenting and genetic testing, Bryn-Williams Jones and Janice E. Graham (2003) reference ANT as "an approach that explores the taken for granted

nature of technology by tracing the social and technical relations involved in the development and implementation of new technologies” (p. 271). First developed by Bruno Latour and Michael Callon (1992), ANT more simply seeks to analyze complex networks in scientific research settings. This conceptual framework views all human and non-human factors in an environment within a constantly adjusting network of relationships. Even the medium of exchanges among these entities play a pivotal role in the establishment of these networks.

Accordingly, ANT can be utilized to assess the outcomes and movements of these networks using verifiable observations and experience, rather than logic. This mode of analysis helps researchers understand the evolution of their actors and results through an iterative process of establishing and re-establishing networks. Jones and Graham do just that in their article on genetic testing when they formulate a web of all involved actors, and provide a discussion about the commercialization of new genetic technologies. In a similar vein, ANT can and will be applied to an exploration of collegiate economic programs in an effort to discuss how to optimize their productivity. Through the course of this thesis, ANT will remain a lingering methodology in order to recognize all relevant actors in an initiative. To do so, the framework next warrants the need to collect and assess data on how current programs and missions at the university level integrate and interact with pertinent actors. This includes components such as the statistical reports, websites, interviews, and other material collected that depicts the efforts of the organizations.

Economic Catalysts at the University of Virginia

Creating Assets, Savings and Hope

The University of Virginia (UVA), in Charlottesville, Virginia USA, provides its students ample opportunities to give back. Many of these UVA students are aspiring business leaders and entrepreneurs who work with a subsidiary program in Madison House called Creating Assets, Savings and Hope (CASH), which supports local Charlottesville and other Albemarle County residents in their tax preparation services. CASH provides a well-rounded experience to low income families by applying their qualified student-volunteers to obtain their IRS certification, dedicate assistance and follow-up sessions, and explain the tax process thoroughly so as to promote independent tax filings in the future, should a family desire. Since 2007, CASH volunteers claim to have yielded over \$29 million of direct economic impact to Albemarle County families (Creating Assets, Savings and Hope). As recently as 2019, CASH stated that their nearly 270 volunteers have personally averaged \$60,000 in direct economic impact to the Albemarle community during tax season. Cole Chisom (personal communication, February 11, 2020), a 4th year student-volunteer, speaks on CASH's efficacy when he explains that "families in the Albemarle community may receive a meaningful tax break that helps them afford their rent or send their children to school" as a result of the team's services. Qualifying individuals and families of all ages are welcomed to take advantage of the program at neutral sites, strategically located to increase the accessibility of the program. CASH and other similar Madison House subsidiary programs reveal that a motivated workforce is a subtle and powerful attribute of successful initiatives. Regardless of the academic, social, or equitable inspiration that galvanizes students such as these, a strong university initiative is driven by pure motivation and interest. Student-volunteers at CASH, such as Cole Chisom, possess no desire for compensation,

and rather a genuine interest in the cause at hand. It is difficult to claim that CASH's success is solely derived from its rigorous application and interview process, but this case justifies the requirement to identify a dedicated staff.

However, the initiative still possesses some inefficiencies. An examination of the demographics of the Albermarle communities shows that these services do not reach every subject of the economy. When expanding on the discussion of CASH's accessibility, Cole Chisom (personal communication, February 11, 2020) comments that "capacity building could be the biggest area of improvement for [his] program as it pertains to resolving the disconnect between UVA and local residents." Though CASH reaches, and arguably surpasses, their outreach goals, there remains more staff potential that can be utilized to connect with more families. Along the same line, this trend has been realized by many other Charlottesville residents, such as Larkin Mott. Ms. Mott, an active adult who has lived in the county her whole life, shares that the collaboration of UVA and the greater Albermarle County has so much potential at its fingertips, but has "fallen behind-the-times" in their planning and execution (personal communication, October 2, 2019). She expands on this issue by referencing the lackluster delegation, awareness, and technology that has led to this inability to seize that potential. In addition to many other cohorts, CASH exemplifies Ms. Mott's concern for lost potential. To assess this problem, the ANT framework directs CASH to re-examine their connection to Albermarle County residents. CASH may achieve this goal of capacity building by better advertising its services to actors not fully represented by all demographics, or offering tax filings at more neutral sites. This analysis suggests that not only should a workforce be diverse and accessible, but also the stakeholders that the cause seeks benefit and the methods of reaching them.

HackCville

Similarly to the Michigan EDA chapters' endeavor to support local businesses and entrepreneurs, the University of Virginia has launched a partnership with a program called HackCville. Founded in 2012, this non-profit teaches ambitious university students modern computer skills, such as software engineering, data science, UX/UI design, and digital marketing. Upon completing the entrepreneurship-focused program, HackCville connects its interns with their 110 nationwide partners located in New York City, Washington DC, Richmond, and yes, Charlottesville. In the 8 years since its inception, HackCville has graduated and connected over 1,400 UVA students with regional start-up companies (HackCville, n.d.). Many graduates have gone on to base their own start-ups in the Charlottesville area, such as the founders of *WillowTree* and *Beanstalk*. Both start-ups have utilized the skills taught in HackCville's program to launch their businesses. *WillowTree*'s teams apply their web development expertise to help companies build apps, websites, and bots (WillowTree, n.d.), and *Beanstalk*'s pursue food insecurity resolutions through means of biology, hardware, and software (Beanstalk, n.d.). These cutting-edge business leaders are not only improving the working world, but also providing knowledge and opportunity for fellow, ambitious UVA students to follow in their footsteps when they get involved with HackCville. While Thomas L. Harnisch may marvel about the value of teaching entrepreneurship and business skills to collegiate students, herein lies more than just that; in addition to students, connection programs as such are a foundation of the entangled network of actors in the local economy. The ANT framework uncovers this foundation by highlighting the distinct medium of exchanges between HackCville and local businesses, such as mentorship programs, business seminars, and internships. In a city like Charlottesville where many residents comment on the disconnect between its residents and universities, HackCville

mitigates this issue by offering an extensive opportunity for the two actors to converse and begin a partnership.

Plus, as a growing center for technology, innovation, and entrepreneurship, Charlottesville finds itself composed of many small-businesses and start-ups that require a skilled and driven team of employees. Carly Tereskers, a UVA student who has been born and raised in Charlottesville, claims that the town is changing rapidly. She dissects how many new technologies are being introduced and it is necessary to keep up with the change via the media (personal communication, October 9, 2019). The change Carly spells out is the product of commercialization and a need for skilled labor. HackCville recognizes that demand, and supplies Charlottesville and regional businesses with competent job applicants. As emphasized in the success of CASH, HackCville does not just “focus on software engineering, but also denuclearizes technical requirements for students” in order to increase the diversity of the program, says student Nathan Shirley (personal communication, February 12, 2020). Nathan speaks about the mentorship and support provided at HackCville when he describes the “vast pipeline of regional start-ups and businesses [he] has been able to connect with through [his] program” (personal communication, February 12, 2020). Regardless of the company mission, the establishment of UVA graduate-owned businesses in the Charlottesville area uncovers the commitment to the community that initiatives should embrace. Economic development can be ushered in via comprehensive placement and connection programs. As does HackCville, initiatives must provide an opportunity to foster dialogue between their students and the businesses and economic programs within the community.

Discussion: A Unified Approach

After investigating past and current initiatives at various universities across the United States, there initially appears to be distinctions in every case. This examination unearths student-led missions that aid the local economy through a public financial curriculum; resource allocation; tutoring; tax assistance; and entrepreneurship support. Amidst the successes and failures of each of these, there appears no proper method of outreach to local residents. But economic development is no race. There is no single winner or loser in the many outreach programs that may exist at a university. Instead, ANT proposes an evaluation of the entire network of actors, and accredits each individual mission as a cog in the overall economic development machine. In a much simpler explanation of the guided assessment from ANT, the goal of fostering a connection between universities and their local economy is shared among many different initiatives and their leaders, and should thus be viewed as a joint collaboration. This strategy does not relieve any individual programs from scrutiny, but rather implores the actors of each mission to understand the role they contribute in the overall network. Therefore, a unified approach to assess a university's connection with the outside economy must be focused on the university's joint endeavor, with criticism trickling down to each individual initiative to play their part. In this thesis, research and data have revealed numerous takeaways from succeeding and failing programs.

Of the many takeaways, student-led initiatives should:

1. iterate off feedback;
2. endorse an accessible presence;
3. encourage diverse workforces and beneficiaries;
4. maintain a comprehensive outreach plan.

When evaluating a university's economic development aspirations, the effort should first reflect subsidiary programs iterating off feedback from the local economy. A mission may have all the intention in the world, but it is useless if the attempt does not reach an audience. Thus, to properly reach the intended audience, universities should encourage their programs to have dialogue with the local residents, and understand constructive criticism and review as necessary elements of optimization. Next, these same universities should also emphasize to its students and leaders to endorse an accessible presence. Many state colleges are privileged with funding and expensive resources. Though initiatives should acknowledge the integrity of their resources, these tools have the capability of stimulating growth for many students, businesses, and general residents in the local community. Thirdly, university sponsors should encourage diversity throughout their student-led programs. A versatile workforce will bring new talents and ideas to grow and change with the economy. Different methods of reaching the community will also enhance a more extensive coverage of communities. Finally, universities should support their programs in establishing and maintaining a comprehensive outreach and dialogue with residents. Dialogue comes in many forms, including public forums, mentorship programs, and even polls. Regardless of the avenue and audience, providing pervasive methods of dialogue between students and residents will allow an initiative to operate more effectively. While an inquisitive

reader may unveil other relevant attributes, these four comprise an approach that research suggests will improve the disconnect between universities and the local economies. It is in this unified approach that this thesis analyzes how university led initiatives can be optimized to foster economic opportunities in the surrounding communities.

Conclusion

The conversations and cases from these various university programs reveal the many avenues that can be taken to support economic development in the surrounding communities. As uncovered by the differences in Harnish's and McFadden's arguments, there are numerous justifications and methods of mitigating the disconnect between colleges and adjoining economies. In its progression, this thesis discovered attributes that student-led initiatives should seek to encompass and omit, regardless of the method one may interact with the economy. Essentially, a unified, qualitative approach to evaluating university-sponsored missions has been discussed and disentangled. However, the lingering limitations and failures of some programs suggest some gaps in the process, particularly on the quantitative side. This suggests that future studies and strategies should be focused on identifying the proper metrics and steps that teams take to communicate their standing, both internally and externally.

When researching this mode of analysis further, metrics that disclose efficiency, iteration, and outreach should be emphasized. These promising metrics provide a wholesome appraisal of an initiative in conjunction with the previously discussed evaluation. For example, CASH dissects their success as a means of its output. One may easily identify CASH's financial aid to its stakeholders, but a partner may also relish the return on investment that their funding has provided. Though its private integrity should be emphasized, a similar program may thrive from

metrics that displays their capacity utilization, demographic outreach breakdown, or resource availability, to name a few. Just as athletics and workplace management systems have recently embraced tools that measure the quality of their models, metrics could prove advantageous to the continuous improvement of university sponsored initiatives as well (Debnath et al., 2012). The quantification of successes and failures via metrics would not only prove beneficial to the students running the initiatives, but would also provide transparency to residents in the local economy contemplating their involvement with an initiative. The Mississippi State Extension unveiled the importance of iteration. Metrics provide a valuable opportunity to receive feedback and adjust an initiative accordingly to better contribute to the goal of economic development. In collaboration with the qualitative approach this paper presents, future exploration into the public quantification of student-led operations would prove to be promising.

This thesis seeks to collect data and identify how universities can interact with local economies to provide economic aid and growth. Not only was each considered initiative distinctive from the next, but so was the respective university that hosted the initiative. The research will show that this trend will likely continue across every college in the United States. But, the goal itself remains consistent. The goal of establishing student-led initiatives that foster economic opportunities in surrounding communities is shared across the nation. It is through this common denominator that we can assess how universities and their students can approach and optimize their missions. In this researched, unified approach that consists of iteration, accessibility, diversity, and comprehensiveness, universities can identify methods that will incite change in their surrounding economies. While this approach assembles research from various actors, it is still incomplete. Whether through a continued examination of future initiatives or the discovery of quantifiable metrics, there remains areas of investigation to strengthen this

approach. However, there should be no remaining doubt that student-led initiatives have the capacity to connect with the local economy. This thesis should serve as just the beginning of a continued discussion into how university led initiatives can be optimized to foster economic opportunities in the surrounding communities.

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