Growing a Network: Surveying Community Gardens Within the Asheville Area

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Abstract

There are 11 food deserts within the Asheville, NC area. Food deserts are neighborhoods characterized by primarily low-income residences and low access to fresh, healthy foods. Food deserts cause a lack in nutrients and are related to higher prevalence of obesity, diabetes, and many comorbidities within the population that lives there. Bountiful Cities is an organization that works to reduce food deserts in our county by assisting communities in establishing gardens to grow their own produce. Recently Bountiful Cities conceived a plan to determine community gardens' needs for a collective network in which gardens in the Asheville area can share resources. The purpose of this public service project was to undertake a survey on gardens within our region. By having such information, Bountiful Cities can perceive whether a garden network would be beneficial for the Asheville community, be able to tailor it to address problems and challenges faced by gardeners, and ultimately help gardens to increase and improve their impact on their communities. For this project I worked with Bountiful Cities to create a survey and interviewed 20 individual garden representatives on garden challenges, needs, successes, and more. I then worked with a group of UNCA students to condense and analyze the data into a summary report for use by the organization. Through this project I have experienced some barriers to and benefits of working with members of the community. I have also learned the importance of organization and data collection in helping organizations receive their intended results. Lastly, I gained a greater understanding of the impact of municipal gardens on populations beyond the provision of food, including community, exercise, family, and safety.

Background/Origins of the Project

According to the United States 2008 Farm Bill, a food desert is defined as "an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower-income neighborhoods and communities" (Agricultural Marketing Service). This definition describes an area in which the residents are low-income and have limited-to-no means of transportation to be able to reach a store that carries fresh and healthy food. Residents become dependent on gas stations and corner stores that offer low-quality and low-nutrition options. The consequences may be higher rates of obesity, diabetes, and other potentially life-threatening health problems within a population (Bader, 2010, p.409-430).

For a community to qualify on the USDA census as a food desert, it must meet two separate conditions. First, it must meet the requirements of a low income community; one in which twenty percent or more of the community is at poverty line, or the median family income is at or below eighty percent of the area median family income. Second, the community must qualify as a low access area in which 33% of the population lives more than one mile from a supermarket or large grocery store (Agricultural Marketing Service). These two circumstances make it extremely hard residents to access a store where they can purchase fresh produce and other healthy food items.

Western North Carolina has at least eleven classified food deserts (Igelman). Many are areas within and immediately surrounding the city of Asheville and primarily centralized in Buncombe County (Ver Ploeg). According to the Western North Carolina Vitality Index, food deserts make up nearly 18% of our region's entire population. Twenty-two percent of the children in our area live in these low-wealth regions (Health Rankings).

Among the approaches to reduce the prevalence of food deserts, community gardens hold promise. Community gardens are run primarily by volunteers to produce food for many community members to be nourished physically and emotionally, and are vital to those who live in low-income neighborhoods where fresh food access is scarce. Community gardens do much more than provide the community with food. They are a place where neighbors and community members have the opportunity to work together to achieve a common goal. As discussed in the piece, Community Garden Interventions, when a garden is planted and cultivated by the community, it achieves a variety of key social, economic, political, educational, and health-related goals (Delgado). This cooperation creates a bond and sense of cohesiveness within the neighborhoods, bringing individuals closer, thereby decreasing disputes among neighbors. It also gives children a place to learn and grow, and increases individuals' physical activity and time outside. By providing a nourishing atmosphere, gardens can be used to feed communities while also making it safer for neighbors to roam securely in their neighborhoods. These aspects as well as many others address not only food insecurity but also obesity and related health conditions.

Locally, Bountiful Cities is a non-profit organization that helps to establish community gardens, provides tools and resources for gardens in need, assists with grant writing and financial issues, and provides gardening education within the community. In their own words they are "the urban agricultural resource in Asheville. [They] share agricultural skills and resources to promote social justice and economic viability" (Bountiful Cities). As an organization, Bountiful Cities continues to support community gardens to benefit their communities at their most optimal potential and to help them address needs and barriers. Nicole Hinebaugh and Darcel Eddins are the Bountiful Cities staff who had the idea for this public service project. They wished to connect the many gardens within and surrounding Asheville and to create a network to share resources, knowledge, funding, and community. Bountiful Cities contacted my advisor, Dr. Ameena Batada, for support, and that is how this public service project and my involvement originated. This public service project sought to understand what the gardens in our area need, the challenges they face, how they have achieved their success, and how Bountiful Cities can better serve them.

Methods and Work Undertaken

The end goal of this project was to possess a collection of data on each garden in the form of a summary report, as well as to understand the need for the creation of a garden network. My role in this project was to conduct the survey of gardens and to compile and prepare the report for Bountiful Cities beginning May of 2015. First, the Bountiful Cities staff and I created a comprehensive list of the community gardens within Asheville and surrounding towns. These gardens included charity, school, community, and production gardens. Once this list was created, Nicole Hinebaugh and I drafted a survey questionnaire on Google Documents to be dictated by myself to each garden representative. The questionnaire included topics about challenges, successes, tools, financial support, volunteers, and produce markets. We also wished to know each coordinator's perceptions about being a part of a collective garden network within Asheville. Nicole sent an email message to each garden contact to explain the goals and plans of our project. She requested that each garden representative respond with a time to be interviewed. I conducted interviews in person instead of sending the survey via email to ensure the survey was completed, to be able to explain questions to individuals, and to demonstrate the value of the individual's time. I interviewed 20 garden representatives at their garden sites over the summer of 2015.

To analyze the information collected, I collaborated with a group of students in a Health and Wellness Class, "Community Health Promotion: Theory and Practice," at the University of North Carolina Asheville during the fall 2015 semester. Nicole Hinebaugh explained to the students what had been done to survey gardens and what her hopes were in moving forward. The organization wished to have the surveys transitioned from a Google Document into a more accessible format. As a group and with the help of my advisor, we concluded that the use of a Survey Monkey platform would be most beneficial. This platform could be used to generate tables from the information collected as well be used to survey additional gardens in the future. The questions within the original questionnaire were divided between myself and the students involved. Together, students entered the data from each question – mostly open-ended responses – into the Survey Monkey template. We added answer options based on the nature of the question, such as multiple choice, short answer, or yes and no answers, to make the answers quantifiable.

From the data platform, the group created summaries of the responses from each survey question and the trends in the data. We explained the collective responses more in depth and discussed similarities and differences between gardens. I then took the summaries and drafted a final report for Bountiful Cities to review. Nicole at Bountiful Cities reviewed and made suggestions on the report and I met and worked with her to continue to edit and revise the report until we were able to finalize it.

Having this Community Gardens report allows the organization to view all of the data at once. This report also makes it much easier for Bountiful Cities to share information about local community gardens with others, such as funders and supporters, who may be interested in the project.

Challenges Faced and Responses to those Challenges

I encountered several challenges throughout the project. At the beginning phases of the assignment, there were difficulties scheduling appointments with garden representatives. Multiple times an individual missed the scheduled interview time. It was also hard to find times that were convenient for both the representative and myself. Many garden contacts did not respond to the email and phone call attempts to connect with them, which speaks to how busy they were. This caused us to have fewer surveys completed than anticipated. Having fewer gardens participate also put the information at risk for bias, as not all of the area gardens were properly represented. Bountiful Cities hopes to address this bias by interviewing unrepresented gardens in the future.

Another challenge was the timeline given by my community partner. Bountiful Cities had hoped that all interviews would be scheduled and completed by the end of the July 2015, however, the process stretched

into the fall of that year. A large frustration related to this was that new gardens were added to the interview list by the organization throughout the entirety of the project. This made it difficult to interview all of the gardens, as well as focus on quantifying and summarizing the completed surveys. Eventually I had to express this frustration and discontinue interviewing additional gardens.

Limited resources, such as money for gas, was another trial encountered during this project. Although most gardens were located in the city of Asheville, others were located in towns such as Swannanoa, Black Mountain, and Fairview. These gardens required more time to travel to as well as additional resources in the form of fuel and money. However, these plots were some of the most influential within the community. All of the gardens that were interviewed outside of Asheville strictly donated their crops and worked to provide fresh produce to food pantries and food distribution sites, such as Bounty and Soul in Black Mountain. Learning the success stories of these projects proved extremely rewarding as they were some of the most interesting and successful gardens within their communities, which proved that facing this challenge was worthwhile.

A personal challenge I faced was the anxiety that came with traveling to new places alone. I felt anxious meeting with individuals I did not know in places that I had never been before. This mainly happened when I had to interview individuals within higher crime areas such as the Pisgah View Apartments and the Hillcrest Apartments. I also felt some hesitation from garden representatives when they met with me. Being a young, white, college woman, caused me to encounter some harshness when I met with some garden representatives. However, after talking and expressing my excitement for the project, these individuals became much more welcoming. Seeing this change was incredibly rewarding; I made friends and connections with each garden manager that I met.

Using technology within a garden setting was a challenge as well. Bountiful Cities and I wished to have the surveys electronically reported, so a laptop or tablet had to be brought along when visiting each garden. Often there would be issues such as the computer battery dying, not being able to access the questionnaire document, or not being able to type fast enough record everything that the individual would say. This left room for errors in the survey that had to be corrected later on. This issue was diminished by having a back-up option if needed, such as a power cord and a saved version of the survey questions on the device.

There were also many challenges while working with the Health and Wellness Promotion student group. Scheduling to meet in between classes and work schedules was a challenge yet again for this portion of the project. While working with the survey questions and answers, many of the students did not understand some of the answers because of typing errors. I did not have time to edit some of the survey answers or I missed errors, which made them hard for students to interpret. This was frustrating because often the student would not express their need for help or clarification, leading to more errors and false information.

The most challenging aspect of this project was when one of the student group members had to withdraw from the project, leaving much of the divided work unfinished. The original work that had been assigned to the individual at the beginning of the project had not been completed. These data had to be entered into Survey Monkey and all summaries had to be rewritten to include these missing gardens. Dr. Batada, my advisor and the professor of this course helped tremendously by completing most of this unfinished work. This was a trying, time-consuming process for all involved. I would have been completely overwhelmed without the help of a team and an incredible advisor to separate the work throughout the entirety of the project, especially during this inconvenience.

Project Outcomes & Sustainability

The garden interviews and summary report provided Bountiful Cities with needed information to create a

garden network. This network helps to connect all gardens within and surrounding the Asheville area. Having these connections as well as regular meetings, the garden workers are able to share knowledge, skills, tools, funding, and volunteers. The network has also been able to have large workdays in each garden to help achieve project goals as well as to teach workshops to benefit garden production. Bountiful Cities is also able to engage in dialogue with all gardens, to discover how they can help the gardens further, as well as broaden the gardens' capacities to supply food and community to their neighborhoods. The organization has expressed that they were able to use the data collected to know which tools to purchase, based on which ones the gardens needed most, such as kitchen supplies, heavy equipment, and hand tools. The organization was able to hire a coordinator to oversee this network and ensure its longevity as well.

The completed surveys as well as the summary report created are both extremely significant and sustainable projects. Having the surveys entered into a program that can clearly display the data enables these records to be more accessible and useful to the organization. Bountiful Cities is able to use the Survey Monkey system to see trends and themes between the gardens. By noticing this, they are then able to change and fit the garden network to address these trends and solve major problems that the gardens may be having. Seeing changes in these trends will show Bountiful Cities how they are being helpful and what aspects of the network they need to spend more time on. The organization is also easily able to share this data with other organizations like theirs to create a larger impact in low access communities. The collected information may also be used to guide volunteers or those who struggle with food insecurity to the garden that best suits them.

The summary report created by the UNCA student group and myself is an assembled report of the data collected. This report gives the organization the ability to share and present the information and the project easily with others. More importantly, however, is that the organization can submit this report to receive grant money. Obtaining grants allows the organization to continue to help the community expand and enhance its programs further. Lastly, now that the survey questions are properly entered into a formal survey platform, Survey Monkey, the organization can complete this same process much more easily in the future, to collect data to compare how the gardens have changed or been helped over time.

Ties to Academia

This project has helped me to discover many valuable lessons and reinforce those that I have learned throughout my academic career. At the beginning of the project, I experienced the importance of proper communication between myself and my community partner, a component of my course of study but one that seems remote until actually carrying out a community-collaborative project. This was reinforced by complications that arose with the project when all parties were not on the same page, such as with the timeline and the addition of new gardens to interview. This was also represented by how much easier the project became when there was proper communication. I also learned the importance and significance of organization during this assignment. The directors of Bountiful Cities were extremely organized and created spread sheets as well as timelines for me to follow throughout the project. This was helpful to keep track of the progress of the project as well as to set goals. When I failed to use these tools I would often lose track of important information and create more work for myself.

In my Community Health Promotion class, we discussed the difficulties and benefits of working with communities and organizations. These topics became very relevant during my work this summer. When meeting with some of the members of the community, I received varied reactions due to my appearance and social status as a young college student. This was something we had discussed as a challenge within my class. When meeting in some lower income communities or with organizations that worked with these communities, I could feel tension and sometimes rudeness due to my presence. I understood the reasons behind this were due to my perceived privilege as a college student and did not allow it to impact the project. In a similar discussion within my Senior Capstone class, we debated the ethics of an outside organization entering or changing a community after watching the film The Beauty Academy of Kabul. In

this film, Americans travel to Afghanistan after the rein of the Taliban to start a beauty school for the women living there. I could use this discussion to question the ethics of entering a food insecure community as opposed to having an individual from that community create change from the inside.

This project also has provided me with links to the broader work around community gardens. During my junior year at UNCA, I was able to attend a campus event in which the director of Growing Power, Erika Allen, spoke to our campus. Growing Power is an urban farm that utilizes the help of their neighbors to grow food and feed their community. Much like Bountiful Cities, Growing Power also helps other communities establish gardens to feed the hungry. During this presentation, Erika explained how not having access to fresh and healthy foods affected her community and its health. She also explained how her community was underprivileged because it was one of color and lower wealth. I was able to relate this lecture to many of the communities I had interviewed. Most of these areas, such as housing communities and historic African-American neighborhoods, struggle the most with food insufficiency. Because of this, community gardens are extremely helpful for these communities to be able to take control of their own food and food systems, ultimately combatting oppression. Experiencing the issue of this lecture in my own community showed me the importance of attending community events, as well as the benefit of learning from and connecting to other communities. This topic also brings me to question how best I can be involved in these communities while coming from a place of relative privilege.

This project taught me the significance of data organization and statistics in projects outside of the academic setting. Without having the ability to work with the data given or organize it in a proper way, it would not have been useful to the community partner. Without these data we also would not have been able to see trends between gardens, share the information collected, present to grant organizations, or see changes in the community after implementing a program.

I also learned the extreme importance and qualities of leadership because of this project. I had not been in a substantial leadership position before this assignment. Being in charge of a group of students pushed my boundaries and allowed me to develop more concrete leadership skills. It was challenging for me to ask for individuals' participation as well as to confront issues within a group. Being in charge of the project made me responsible for the group being behind or not finishing work. This was a challenging responsibility to grasp. This role prepped me for the future and prepared me for taking on a management position if the occasion presents itself after college. It also helped me to understand the roles and responsibility of being a group leader. Without fulfilling this role while in school, I believe I would have been too timid to take on a leadership position in a future job.

Conclusion

I am fortunate to have taken part of this project, with all of its rewards and challenges. The lessons that I have learned from working with a community partner, in the community, and leading a group of peers are ones that I could not have grasped in a classroom alone. I also was able to learn more about and experience topics I am very passionate about, gardening and food security. Interacting with garden representatives allowed me to make many connections within our community and learn about the impacts that these gardens have. It was extremely heartwarming to hear individuals' stories and understand how passionate they were for their communities. Working with my peers allowed me to make connections at school as well. I was able to learn about my classmates, their work styles, and what they were passionate about.

Although this was a small project, I believe the value and impact of it was large. I discovered many aspects of responsibility and leadership that I did not know before. This project was extremely valuable to my community partner for many reasons as well. Bountiful Cities was able to use the data that was collected and organized to create a garden network and will be able to use it in the future to secure grants and expand the program. Lastly, the gardens that were a part of the project received value from becoming part of a network to help them grow and expand, while their neighborhoods and communities will be able

to receive more abundance from the gardens. This project successfully acknowledged needs and challenges expressed by the garden organizations and will further help to feed those in need through both nutrition and community. I believe that being a part of this project has helped me to be a part of the solution to the problem of hunger in our communities.

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