

THESIS

A RETURN TO THE FIELD:

YOUTH DEVELOPMENT THROUGH AGRICULTURAL PROJECTS

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ABSTRACT

A RETURN TO THE FIELD:

YOUTH DEVELOPMENT THROUGH AGRICULTURAL PROJECTS

This case study seeks to document and describe agriculture based youth development programs by examining the AgriCorps program of the Larimer County Conservation Corps (LCCC). This study draws upon community based action research methodology to provide detailed documentation of the AgriCorps program and to assist with future program development. The AgriCorps program is an introductory employment opportunity through which youth, age 14-16, gain work experience, exposure to environmental and social issues in the food system, and complete meaningful conservation work on urban farms and gardens in Larimer County, Colorado. This program provides youth with experience adhering to workplace expectations, opportunities for soft skill development, and resume writing. In addition to personal and professional development, the AgriCorps also gives youth the opportunity to learn more about the social and environmental context of urban agriculture through structured education, informal field talks, and reflection activities. Lastly, the work completed by the AgriCorps crews contributes to meaningful conservation work by providing labor to urban and sustainable agriculture projects in Northern Colorado. The AgriCorps is a unique hybrid several different youth development program types: youth conservation corps; service learning; and garden based education. As such, the AgriCorps program can serve as a model for organizations interested in developing a youth development program that work in partnership with urban agriculture projects. This research also contributes to the limited literature on youth conservation corps and agriculture based youth development programs by highlighting a successful case of youth development through agricultural projects.

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Chapter 1: Introduction

A century ago, personal and professional development happened at home, not through school or youth development programs. The value of hard work, time management and life skills were then taught through work in the home, on the farm, or small business. Rural children in particular received early exposure to workplace expectations by taking on responsibilities on the farm. From a young age, farm children rose with the sun, tended livestock, and helped with the planting and harvest of food crops, instilling both a strong work ethic and a personal connection to food. Today, few young people have any conception of where their food comes from, let alone the hard work that goes into growing it. To address these issues, youth development programs have been emerging around the country, which combine personal and professional development and urban food production.

Youth development programs aim to assist young people through the transition from adolescences to adulthood by promoting the development of crucial personal, social, technical and academic competencies (Cochran and Ferrari 2009; Hamilton and Hamilton 2003). Youth development programs vary greatly and can encompass programs such as youth conservation corps, internships, and service learning. Youth development programs serve a wide age range, as the term youth refers to the period of transition between childhood and adulthood, rather than a fixed interval (UNDESA 2014). For the purposes of this study, youth will include individuals ages 14-24: younger youth will refer to ages 14-16; teens, ages 14-19; and young adults, ages 18-24. Summer labor force participation among youth, ages 16-24, has been steadily declining in the United States over the last 20 years (Bureau of Labor Statistics 2014; Sum, Khatiwada, and Palma 2010; Symonds, Schwartz, and Ferguson 2011). Youth employment rates had been on a steady decline since the economic downturn of 2007, but have largely plateaued since 2010 (Bureau of Labor Statistics 2015). In 2014, 60% of youth were employed, up slightly from the previous year, but still significantly lower than the 1989 peak of 77% youth employment (Bureau of

Labor Statistics 2014). The Great Recession has negatively impacted teens to a greater extent than any other age group; low-income minority teens seeing the harshest impacts of this trend (Symonds et al. 2011).

Youth have unique barriers to obtaining employment that youth development programs seek to address. Increased competition in the job market has resulted in many employers using educational attainment and work experience as a pre-requisite for employment (Prause and Dooley 2011; Symonds et al. 2011). Youth often lack the necessary educational credentials and/or the relevant work experience to enter the workforce. Work experience is becoming increasingly difficult for youth to obtain, particularly for teenagers (ages 15-18) who have a more difficult time finding employment than older youth (ages 18-24) (Martin 2009). A study of 13 industrialized countries showed common barriers to youth employment to be lack of seniority, work experience, decreased mobility, and fewer financial obligations that result in employment being taken less seriously (Martin 2009). Additionally, young people are delaying entering the workforce and staying in formal education longer (Martin 2009; Symonds et al. 2011). Further, youth have less experience with the job search and application process, which puts them a greater disadvantage in the competitive job market (Martin 2009).

These barriers are cause for concern because youth are especially vulnerable to adverse impacts of economic stress due to under employment and unemployment (Prause and Dooley 2011; Symonds et al. 2011). Youth workers experience disproportionately high rates of discouragement with their employment status compared to their adult counter parts and are more are susceptible to depression and alcohol abuse due to their developmental stage (Prause and Dooley 2011). Studies have shown that unemployment in youth can negatively influence lifetime earning potential (Morz and Savage 2006; Scott and Richard 1995). Analysis of data from the National Longitudinal Survey-Youth (NLS-Y) that the early career is characterized by transitions in and out of the labor force and between jobs of various durations

(Scott and Richard 1995). Further analysis of NLS-Y data by Savage (2006) reveals that even a brief period of unemployment at age 22 has a negative impact on both immediate and lifetime earnings. Conversely, teens who have positive work experience during their teen and young adult years, “are more likely to be inspired to stay in school, graduate and adopt ambitious goals,” and improve their job prospects and earning potential (Symonds et al. 2011: 3). Youth development programs coupled with early employment can translate into a more stable early career cycle that may result in higher lifetime earnings.

Though youth employment has proven to improve the lifetime earnings and job satisfaction, employment programs designed to help youth attain jobs have not received consistent federal support in the United States. In 1978, the Comprehensive Employment and Training Act (CETA) included an ambitious Youth Employment Demonstration Projects Act which sought to respond to economic and social issues prevalent in the 1970s (Brown and Thakur 2006). In 1982, the Job Training Partnership Act (JTPA) replaced CETA and shifted the focus of employment training and eliminated many youth employment programs. Throughout the 1990s research highlighted the positive impacts that youth development programs were having on at risk youth. The Workforce Investment Act of 1998 (WIA) replaced JTPA and allocated more resources for federally supported youth workforce development programs (Brown and Thakur 2006). Today, the Department of Labor’s Employment and Training Administration provides youth services funded through WIA that: 1. Increase the number of youth entering employment, post-secondary education, or advanced training; 2. Increase the number of youth attaining a degree or certificate; and 3. Increase literacy and numeracy gains (Employment and Training Administration 2015). Services provided through WIA programs include: Tutoring; alternative secondary school offerings; summer employment opportunities linked to academic and occupational learning; paid and unpaid work experiences; occupational skill training; leadership development opportunities; supportive services; mentoring; follow-up services; and comprehensive guidance and counseling (Employment and Training

Administration 2015). WIA services are available only to youth ages 14-24 who are low-income, and have a demonstrated barrier to employment.

Non-governmental youth employment and service opportunities also provide opportunities for personal and professional development to a wide range of youth regardless of income or disabilities. Youth development programs enable youth to develop crucial personal, social, technical and academic competencies that prepare youth not only for the work world, but also aid in helping youth navigate civic, school and home life with greater ease (Hamilton and Hamilton 2003). Youth development programs emphasize learning that promotes development of skills and help youth transition through key phases of their lives (Cochran and Ferrari 2009). Activities are generally not structured to promote prescribed outcomes; rather they provide opportunities for youth to develop necessary soft skills such as critical thinking, leadership, teamwork, and goal setting (Cochran and Ferrari 2007: 16). Additionally, many youth development programs help youth navigate the job search, application and interview process (Brown and Thakur 2006; Cochran and Ferrari 2009). Work-based learning in youth programming can take many different forms from working within the program organizational structure to working with employers in the community (Cochran and Ferrari 2007).

Program of Interest: The LCCC AgriCorps Program

This thesis will look at how one youth development program, the AgriCorps, combines professional development with work on urban farms. The AgriCorps is a unique program of the Larimer County Conservation Corps (LCCC) a youth conservation corps in Northern Colorado. Youth Conservation Corps, “are comprehensive youth development programs that engage youth in service projects to benefit communities and nature as a means to teach personal and professional skills and additional support for young adults” (The Corps Network 2014). The AgriCorps program was developed by the LCCC in 2011 as

a way to provide workforce experience to younger teens that would ease the transition into the workforce and serve as a feeder for other LCCC programs. Participants in the LCCC AgriCorps program learn how to work in teams, follow directions, and adhere to employer expectations, leadership skills, and the value of hard labor through work on urban farms. Though there are other programs called AgriCorps, the program structure of the LCCC AgriCorps program is original. Hereafter, AgriCorps in this thesis refers exclusively to the LCCC AgriCorps program.

There are programs similar to the AgriCorps that combine youth development and urban agriculture. Some conservation corps' manage farms and urban gardens, notably the Farm at Vermont Youth Conservation Corps, The San Gabriel Valley Conservation Corps Earthworks Farm and the Conservation Corps North Bay (Traverse 2013). These farm based conservation corps programs differ from the AgriCorps program structure in the age range of participants served, the length of program, and activities completed. These corps-run farms serve youth ages 16-24 and range in length from three to 12 months. There are also other similar programs operated by organizations not affiliated with conservation corps such as Growing Power in Milwaukee, WI and Chicago, IL, the Food Project in eastern Massachusetts and Roots and Wings in Rockford, IL. These programs serve youth ages 12-24 and range in duration from four weeks to a full year.

The AgriCorps program works almost exclusively with urban agriculture projects. Urban agriculture takes many different shapes with projects that vary in function, scale, labor, management and market integration (McClintock 2014). According to McClintock (2014), types of urban agriculture projects include: collective; non-profit; commercial (for profit); residential; allotment; guerrilla; and institutional. These categories are not rigid and many urban agricultural projects may draw on elements from various project types. In 2014, the AgriCorps program worked with urban agriculture projects that are collective (1), non-profit (2), and commercial (3) as outlined in McClintock's typology. Collective urban agriculture has a primary focus of community building and food production is managed by a group, often with the

help of a garden manager, and produces food for the garden members. Non-profit urban agriculture often has a focus on food security, food justice or education, is managed by a non-profit organization that provides the labor through staff and volunteers. Commercial urban agriculture focuses on larger scale food production for market and is managed by private business owners or managers and is staffed by employees (McClintock 2014). Different urban agriculture project types offer different experiences to program participants in terms of purpose and tasks based on the market for the produce being grown.

Personal Connection to the Program

I have experience working with this program on a variety of different levels, which informed my understanding what the program is, how it operates, and is reflected throughout this research. I had worked as a crew leader and a farm partner for the AgriCorps program in 2013 and found the experience to be very profound, for myself as a crew leader, for the corpsmembers, and for the other farm partners I worked with. I have worked on sustainable farms off and on since 2010, experiences that deeply changed both my relationship to food and my relationship to myself. Farm work is physically challenging, emotionally taxing, and endless rewarding. You work hard, in hot conditions, tending to plants that grow into food that nourish bodies and relationships. Eating food that I had helped to grow also changed the way that I eat; I cooked more, incorporating more vegetables into my diet, and became keenly aware of the labor involved with getting food from field to table. Being a crew leader with the AgriCorps program provided me an opportunity to translate some of these life lessons learned in the field to younger youth experiencing work for the first time and to connect with other farmers in the area who felt the same. It was amazing to watch the transformation of the corpsmembers over the four short weeks of the program. Corpsmembers would often come into the program shy, insecure, and unaware

of their abilities, and would leave with such confidence in their capacity to both preform physically challenging work and to work well with others. I often found myself reflecting on how different my teenaged years might have been had I had the opportunity to work on sustainable farms rather than as a server at a restaurant during the summer months. I felt at the time that there were some unique lessons about life and work being taught on farms that were under explored by both the LCCC and the research community and I wanted to learn more about these potential benefits of engaging youth in work on urban farms.

Around this same time, I began exploring ideas for an applied thesis project that would both give back to the community and allow me to gain experience with program evaluation. I approached the LCCC shortly after the end of my term as crew leader to follow up on conversations I had had with the corps manager during the program seasons about ways to grow and improve the program. At a meeting in early September 2013, we discussed what needs they had and how I could help them address them through a graduate internship and research. I interned with the LCCC in spring 2014 and worked with the LCCC staff to restructure program evaluation instruments such as surveys and corpmember evaluations, and developed a service learning curriculum used by crew leaders. I again served as a farm partner in summer 2014 during both the June and July session. This research is informed by both recorded and unrecorded observations of the organization while assuming these different roles.

Research Questions and Objectives

The primary aim of this research is to better understand the structure and purpose of the AgriCorps program, and how this program can be used to guide and improve similar urban agricultural based youth development programs. Specifically, I will address following research questions:

Question 1: What is the AgriCorps Program?

Question 2: How does the AgriCorps Program operate?

Question 3: What are the goals and objectives of AgriCorps?

- Question 4: What program activities support stated goals and objectives of the AgriCorps Program?
Question 5: Does the AgriCorps program achieve the stated goals and objectives?
Question 6: How does service learning support the achievement of these goals and objectives?
Question 7: What is unique about AgriCorps—Why Farms?

This study will draw upon community based action research methodology to provide detailed documentation of the AgriCorps program to address the listed questions. Community based action research is a collaborative approach to research that provides people with the tools needed to address specific problems or concerns (Berg 2004; Stringer 2007). This review of the AgriCorps program is a blend of community based action research and case study methodology. Action research utilizes many traditional data collection strategies, but differs from traditional research in orientation, purpose and language used (Berg 2004). Community based action research seeks to include those being studied in the research process and to present results that are both easy to understand and useful to those affected by the research. Community based action research is defined as a, “collaborative approach to inquiry or investigation that provides people with the means to take systematic action to resolve specific problems” (Stringer 2007:17). The goals of community based action research according to Stringer (2007:17) are three part: “1. To systematically investigate the problems and issues of a program or organization as defined by program participants; 2. Formulate powerful and sophisticated accounts of their situations; and 3. To devise plans to deal with the problems at hand.”

This particular community based action research project takes the form of a case study. Case study methodology can be used when studying an event, program, activity or individual and is appropriate to use when studying programs like the AgriCorps that have clear boundaries in time and space (Creswell 2013; Robson 2002). A defining feature of a case study is that multiple sources of data are collected, such as interviews, observations, document analysis and artifacts which is then analyzed through thick description and themes that emerge (Creswell 2013). The findings of case studies are generally structured around unique lessons learned from the investigation of that particular case using narrative, tables, and figures (Creswell 2013).

This thesis was structured around Stringer's (1999) *Look, Think, Act* model for action research. In the *look* stage, the researcher gathers relevant information about a community or organization and works to build a picture. The objective of the *look* stage is help the partner organization "describe their situation clearly and comprehensively" (Stringer 1999: 65). In the *think* stage the researcher begins to explore and analyze what is happening in the organization and to work towards interpreting and explain why and how things are as they are. Finally, in the *act* stage, the researcher begins to plan, implement, and evaluate the changes made ((Stringer 2007:18). An important aspect of community based action research is sharing results with participants (Berg 2004). Insights from this research were shared with program staff at departmental meetings through the research process, and core staff was given the opportunity to review and comment on a draft of the thesis.

Summary

The following chapter of this paper will review relevant literature as it pertains to three different approaches to youth development utilized by the AgriCorps program: conservation corps; service learning; and urban agriculture projects. Next, in Chapter 3, I will outline how I utilized the community based action research methodology developed by Stringer (2007) to collect data for this project. I will also outline each of the various data sources utilized in this mixed methods study in this chapter. In Chapter 4, I will discuss key findings as they relate to the seven research questions outlined in this chapter. Lastly, in Chapter 5, I will review the key findings and discuss implications, project limitations and directions for future research.

Chapter 2: Literature Review

The following section will situate the AgriCorps program within a larger context of youth development. Youth development as a term can refer to a natural process, set of principles, or practices (Hamilton, Hamilton, and Pittman 2003). The term youth development can refer to the natural coming of age process through which young people learn how to understand and act within their environment. In the 1990's youth development was applied to a set of guiding principles used by organizations, individual, and communities to support the growing capacities of youth. Lastly, youth development can also refer to a set of practices used by organizations, program and initiatives that apply the principles of youth development to foster youth development as a natural process (Hamilton et al. 2003:4). Because youth development is such a broad term, defining the principles is not an easy task. The central components of these principles include a positive orientation that all youth thrive, program activities that are appropriately challenging and relationships that are supportive, and active youth participation in the development process (Hamilton et al. 2003). Youth development programs may vary in form, but all strive to ease the transition from adolescences to adulthood by promoting the development of crucial personal, social, technical and academic competencies (Cochran and Ferrari 2009; Hamilton and Hamilton 2003). The AgriCorps combines elements of youth conversation corps, service learning, and urban farm projects to promote youth development. This literature review will look at how youth development is fostered in those three contexts.

Youth Development through Youth Conservation Corps

There is a long history of government programs that support learning and professional development through service such as depression era Works Projects Administration (WPA) and Civilian Conservation Corps (CCC) projects, the GI Bill of 1944, the establishment of the Peace Corps in 1961, and the Youth Conservation Corps in 1970 (Toncar et al. 2006). Youth conservation corps is modeled after the

CCC programs operated from 1933-1942. The CCC was one of the earliest examples of programs that combined public work with education and service learning. The CCC had an established three-part education program combining job training, camp living and various classes (Bass 2013). These activities helped to structure the CCC experience and taught the enrollees about work, the government and the lives they want to live (Bass 2013). Workers in the CCC received on the job training that worked to prepare them for future employment as well as instilling a strong work ethic and specific job skills necessary to fulfill their role in the CCC (Bass 2013). Similarly, youth conservation corps combine on the job training with educational opportunities that better prepare participants for future employment in natural resources and related fields.

Youth Conservation Corps of the 1970's had three primary objectives: 1. To accomplish needed conservation work on public lands; 2. Provide gainful employment for 15- through 18-year old males and females from all social, economic, ethnic and racial backgrounds; and 3. Develop an understanding and appreciation, of the nation's natural environment and heritage (Hamilton and Stewart 1980:186). Hamilton and Stewart created a list of criteria for tasks, leadership, and organizational support for high quality youth conservation corps programs. Tasks needed to: "provide opportunity for cooperation and decision making; result in lasting commitment to the community; provide visible benefits to many; [be] varied; and require high-level skills". Leaders should, "[be] authoritative (neither permissive or authoritarian); have sufficient power to change unsatisfactory tasks and discipline workers; [be] good teachers; and develop relationships with participants". Organizations, "unite control of tasks and responsibility for education, and give crew leaders sufficient support, especially communication, planning time, supplies and equipment" (Hamilton and Stewart 1980:187). Today, the umbrella organization for youth conservation corps, the Corps Network defines conservation corps as, "comprehensive youth development pro-

grams that provide their participants with job training, academic programming, leadership skills, and additional support through a strategy of service that improves communities and the environment” (The Corps Network 2014).

There have been few published studies on the learning outcomes of participation in youth conservation corps and most of which focus exclusively on the 1970’s USDA Youth Conservation Corps programs (Driver and Johnson 1984; Johnson, Shikiar, and Driver 1979; Ross and Driver 1986). Driver and Johnson (1984) published an article on the preliminary results of a longitudinal study of beneficial changes in attitudes, skills, or behaviors through mail in surveys of both the youth corps participants and their parent in 1978. The results demonstrated that there are many perceived social benefits of youth corps participation including work ethic, job search skills, safety and proper tool use, acceptance of other races, and interest in environmental problems (Driver and Johnson 1984). Ross and Driver (1986) furthered explored this data that tracked a 1978 cohort of Youth Conservation Corps participants 26 months after the end of their corps experience. They found that participation in youth corps programming increased job skills and employability even for programs with short durations of 4-8 weeks (Ross and Driver 1986).

Though there is little peer-reviewed literature on outcomes of participation in youth conservation corps, several scholars have completed graduate research looking at program impacts (Hoffman 2004; Miller 1998). Miller (1998) adapted the survey developed by Johnson et al. (1979) to evaluate impacts of participation in the Oregon Youth Conservation Corps (OYCC). Over 400 OYCC participants were surveyed in this 1996 study to better understand how the program influenced work skills, work-related social skills, educational goals, and potential for future employability. Survey results were analyzed with particular attention to variables of risk, program length, and residency status, the latter two being measures of program intensity. Though both program length and residency status positively impacted

program outcomes, Miller concluded that program length may not be as influential of a factor as program intensity. Other researchers have been interested in how participation in conservation corps can influence environmental knowledge, attitudes and skills (Hoffman 2004; Martin 2013). Hoffman (2004) conducted a mixed methods study looking at impacts of participation in the Conservation Crew Program (CCP) on environmental knowledge, attitudes and skills. The CCP is part of the Student Conservation Association, a national service-based conservation organization operating in the US and Canada. Questionnaires, interview, and participant journals were used to assess impacts of participation in the CCP. This study focused on the importance of outdoor experiences in fostering environmental literacy and pro-environmental behavior. Though surveys provided some insight into program impacts, participant journal entries provided rich and useful data. Hoffman concluded that CCP programs could indeed improve ecological literacy and promote environmentally responsible behavior among participants.

The Public Lands Service Coalition conducted an evaluation of specific learning outcomes of youth conservation corps programs across the nation in partnership with researchers at Texas A&M in 2011. This evaluation attempted to address important questions such as: “what types of lasting impacts do [corps] experiences have on participants? Do they influence career paths, conservation ethics, and behavior and subsequent time spent on public lands?” (Duerden, Edwards, and Lizzo 2011). Survey data was collected from 847 participants of conservation corps and 308 comparison group members; 15 participants were former members of the Larimer County Conservation Corps trail crew program. This study found that participation in a conservation corps, “significantly increased community engagement, positive attitudes toward public lands, and environmental activism,” as well as increases in developmental outcomes such as the, “ability to work in teams, leadership skills, and self-responsibility” (Duerden et al. 2011).

Youth Development through Service Learning

Elements of service learning are incorporated into the AgriCorps program. Service learning is a popular approach for youth development in higher education, and to a lesser extent with high school aged youth. Service learning is not an easy concept to define outside of the classroom context, especially for youth development programs where administrators and staff may have multiple and sometimes conflicting sets of purposes for their service learning programs (Stanton 1990). Service learning takes many different forms and it is often difficult to distinguish between other types of experiential education such as internships, field studies and cooperative education. Service learning is often seen more as a program emphasis than a specific type of experiential education (Stanton 1990). Sigmon (1990) suggests that a the distinguishing characteristic of a service learning program is the emphasis on reciprocal learning; that both those serving and those being served are learning and have significant control over what is being learned. Stanton (1990:67) builds upon this notion with the following definition:

An approach to experiential learning, an expression of values—service to others, community development and empowerment, reciprocal learning—which determines the purpose, nature and process of social and educational exchange between learners and the people they serve, and between experiential education programs and the community organization with which they work.

Others have defined service learning as, “any carefully monitored service experience in which a student has intentional learning goals and reflects actively on what he or she is learning throughout the experience” (Furco 1996:2). This definition and others emphasize active reflection as a key component of service learning.

Service learning activities can focus on the individual, organizational, interorganizational or local dimension (Stanton 1990:66). Activities in the individual dimension look like traditional volunteer work such as working with people with disabilities, tutoring or counseling. The organizational dimension resembles an internship where activities focus on assisting an organization with specific needs such as ad-

ministrative assistance, policy analysis, or special projects. The third dimension, interorganizational, allows participants to get involved with generating and/or applying knowledge in the form of field research, need assessments and other activities. Finally, some activities may be focused on general problem-solving, consulting and action research focused on solving a problem for a particular locality (Stanton 1990:66). Service learning programs are often a combination of various dimensions and can occur in a variety of contexts. It was once assumed that service learning could only occur in the context of work with non-profit and government programs, a notion Giles and Freed (1985) dispute. They argue that in the spirit of reciprocal learning that the defining characteristic of service learning should be on the social exchange between the participant and those being served. This exchange can take many different forms depending on the orientation of the students, educators, and the institutions involved and social context in which the service opportunity takes place (Stanton 1990:67).

Service learning programs differ from community service particularly in regards to the level of engagement expected of participants. Community service programs often simply expose participants to a social problem where service learning seeks to engage through active participation and reflection (Levison 1990). Service learning programs that emphasize engagement stress that participants intellectually understand the broader social dynamics impacting the group they are serving. Programs that value engagement have detailed, explicit, and comprehensive learning objectives, while those that simply expose tend to have loosely defined goals such as “providing students an opportunity to serve in the community” or “to broaden students’ horizons” (Levison 1990:71). Engagement programs are important because they help program participants understand the root causes of the problems they are working to address through their service. Simply exposing youth to social problems is not enough to spark social change. Levison (1990:72) argues that, “Service without engagement prepared students to make things less bad,’ and it fails to help them make the connection that will lead to change.” In addi-

tion, student reflections on service programs without engagement tend to be very egocentric and focused on the participant's feelings of sympathy for those they serve and the personal satisfaction they derive from serving others rather than an understanding of the underlying issues that cause the misfortune in the first place. In order to help demystify complex social problems like poverty and to move beyond the egocentric view of community service, service learning programs should seek to engage participants at both an emotional and intellectual level. This is done through structured opportunities for participants to learn, analyze and reflect upon the underlying problems affecting those they serve (Levison 1990).

Researchers have found that structured reflection is one of the defining characteristics of quality service learning (Bringle and Hatcher 1999; Eyler 2002; Eyler and Giles 2014; Felten, Gilchrist, and Darby 2006; Hatcher and Bringle 1997). A philosophical foundation establishing the importance of reflection in service learning can be found in the early work on John Dewey. Dewey argued that linking theory to experience will help learners understand more abstract concepts (Bringle and Hatcher 1999; Carver 1997; Dewey 1938; Giles and Eyler 1994). Experience alone however is not enough to result in educative learning. Experience has the potential to be either educative or miseducative and becomes educative only when critical reflection is added to the experience (Bringle and Hatcher 1999). Active reflection is not something that many youth will willingly engage in but can be extremely beneficial to both the participants and the program (Conrad and Hedin 1990). Reflection can aid in the academic learning outcomes of a service learning program by improving basic skills in areas like reading and writing, give opportunities for students to learn about specific subject matters, to think critically and problem solve and to be able to learn from their experiences. It can also help participants with personal development through giving participants an opportunity to reflect on personal changes that are occurring throughout their service experience, give them a sense of community and foster a sense of ownership in the project. Additionally, reflection can help program coordinators better understand the outcomes of their program

by giving direct feedback on programming details (Conrad and Hedin 1990:89). However, reflection must be structured appropriately to increase learning outcomes or they risk being miseducative and reinforce existing stereotypes (Bringle and Hatcher 1999).

Research on the outcomes of service learning has highlighted the potential benefits on academic success, personal development, civic engagement, facilitating cultural and racial understanding, and career development (Astin and Sax 1998; Eyer et al. 2001). Most of the literature on outcomes of service learning focuses on outcomes of semester-long college courses (Astin and Sax 1998; Vogelgesang and Astin 2000; Yorio and Ye 2012) and less is known about shorter term service learning program and programs that target younger youth. Astin and Sax (1998) found that college students who participated in service saw beneficial effects of service on academic development, life skills development, and sense of civic responsibility. Astin, Avalos, and Sax (1999) further examined the long term effects of community service on student development, finding that many of the short term effects seen in their earlier study (Astin and Sax 1998) persisted beyond college. The scholars were interested in how service impacted career development and commented, “while undergraduate service participation showed no measurable effect on either income or overall job satisfaction, it did show a significant positive effect on the student's aspiration for advanced degrees”(Astin et al. 1999:200). Interestingly, the researchers saw that students who volunteered in high school were most likely to participate in service activities in college, highlight the potential impact of service opportunities for younger youth on positive academic, personal, and career development. A 2012 meta-analysis of more than 40 empirical studies with quantitative variable related to one of three criteria (cognitive development, personal insight, and understanding of social issues) was completed with intentions to better understand impacts of service learning on university-level students (Yorio and Ye 2012). The researchers found a statistically significant positive response for all three measures of service learning, reinforcing conceptual work done by Bringle and Hatcher (1999) (Yorio and Ye 2012).

Youth Development Through Urban Agriculture

Youth development programs such as school gardens, youth farms, and student run university farms promote academic learning, skills development, and improved dietary behaviors through work on urban agriculture projects. Urban farms are accessible places for urban youth to learn about natural systems and to get their hands dirty in an outdoor environment. This is important because today's youth grow up in what Louv (2008) calls the third frontier. The third frontier is characterized by: "detachment from the source of food, the virtual disappearance of the farm family, the end of biological absolutes, an ambivalent new relationship between humans and other animals, [...] and shrinking open space" (Louv 2008:234). Growing up without reference to natural processes like food production causes a whole host of social ills including: "the diminished use of the senses; attention difficulties; and higher rates of physical and emotional illness," what Louv (2008:36) calls *nature deficit disorder*. Programs such as school gardens, youth conservation corps, and university farms help to remedy these ills by providing youth experiences with nature.

Connecting youth to urban agriculture can impact how youth perceive both nature and food production. Youth, particularly inner city youth, seem to be unaware of the role small family farms and urban agricultural projects play in providing food for communities. One study has shown that that youth primarily associate farming with commodity crop production, such as corn or wheat, and assume that farmers are generally old men in overalls and covered in dirt (Holz-Clause and Jost 1995). Urban youth in this study tended to equate agriculture with farming, rather than having any understanding of the broader industry (Holz-Clause and Jost 1995). Programs that connect youth to urban and small-scale producers help to broaden the definition of agriculture and help youth envision future careers in agriculture.

School gardens are an example of urban agriculture projects that allow for children to gain experience with natural ecosystem complexity (Blair 2009). "Gardens ground children in growth and decay,

predator–prey relations, pollination, carbon cycles, soil morphology, and microbial life: the simple and the complex simultaneously” (Blair 2009: 17). School gardens are part of a larger effort to increase the horticultural complexity of schoolyards that can have positive impacts on student academics, behavior, sense of belonging, self-esteem and compassion and can serve as a tool for community engagement and teaching about environmental remediation (Blair 2009: 16). School gardens can range in size and shape from potted plants or raised beds on asphalt to collaborations with working farms. In a 1999 study of 322 recipients of a National Gardening Association Youth Gardening Grant, showed that goals for school gardening were commonly academic (92%), social development (83%), recreational (63%), and therapeutic (52%) (DeMarco, Relf, and McDaniel 1999). “The subject areas that at least 50% of teachers reported that they taught in conjunction with the school garden were science (92%), Environmental Education (83%), mathematics (69%), language arts (68%), health and nutrition (59%), ethics (58%), and social studies and history (51%) (Blair 2009:32; DeMarco et al. 1999).

Though most school and community garden research has focused on elementary school aged youth, Gilbert (2011) argues that high school aged youth may also have much to gain from garden based education programs. Garden-based programming can promote the development life skills (food and farming, stewardship and responsibility and service and action), leadership, community development (social justice, care and compassion and health and access), and immersion in alternative education paradigms. Structuring youth development programs around food and farming can in some instances promote broader social and environmental action. Growing food can help youth develop soft skills such as teamwork and commitment to goals and personal achievement that will help youth be successful in many areas of life. Serving food or donating food to those in need can help young adults understand the complexities of food access and help them to instill an ethic of service and responsibility in program participants (Gilbert 2011).

Youth are regularly involved with community based urban agriculture projects. A study of the Root and Wings urban youth gardening program in Rockford Illinois showed a positive change in self-reported dietary behaviors, agricultural knowledge and leadership skills (Pierce 2012). In addition, many program participants, ages from 6-17, were able list new agriculture skills, ways in which they were healthier, and ways that they had gained independence as a result of participation in the program (Pierce 2012). The Food Project based in western Massachusetts is another example of a youth development program that engages teenagers with urban agriculture projects. The Food Project, in operation since 1991, serves 120 youth, ages 14-17, per year through their farm-based programming. The organization incorporates education about hunger, poverty and food access into their rigorous, practice and integrative programming (The Food Project 2015). The Food Project has three crews, a seed, dirt, and root crew that offer participants to take on more responsibility and develop leadership skills “prepare them to become the next generation of leaders in the food movement or any other field they choose to pursue” (The Food Project 2015). Growing Power is another popular example of a youth development-urban agriculture project. Growing Power’s Youth Corps program is “a year-round, youth leadership program offering both academic and professional experience in Community Food System development and maintenance” (Growing Power 2015). Through this program Milwaukee, WI and Chicago, IL youth gain both agricultural competencies and retail experience resulting in occupational and leadership skills that improve future employability. Growing Power’s Youth Corps has explicit goals of participants leaving the program with “a comprehensive understanding of sustainable food system development and the ability to connect and communicate how the skills they’ve gained at the farm translate to any career path they may follow” (Growing Power 2015).

Research into 4-H programs with an emphasis on rural youth development may reveal potential implications for urban agriculture based youth development programs. 4-H programs emerged in the late 19th century as a way to incorporate more practical education for rural youth and as a way to get

introduce them to and build an appreciation for their environment (Enfield 2001). In the early years of 4-H programming, school superintendents worked alongside agriculture extension educators and parents to provide programming for rural youth that would better prepare them for an agricultural lifestyle. 4-H programs are grounded in the same philosophical tradition of John Dewey's experiential education as service learning and increasingly 4-H leaders are being trained to better facilitate the experiential learning cycle in 4-H programming (Enfield 2001). Participation in 4-H programming has shown to improve life skills such leadership, communicating, working with groups, making decisions, and understanding self (Boyd, Herring, and Briers 1992), responsibility, product production skills, ability to handle competition, and the ability to meet new people among others (Fox, Schroeder, and Lodi 2003). Others have commented on how participation in 4-H can improve agricultural literacy, a comprehensive measure of 11 areas of agricultural knowledge including: (a) Significance of Agriculture, (b) Policy in Agriculture, (c) Agriculture's Relationship with Natural Resources, (d) Plant Science, (e) Animal Science, (f) Processing of Agricultural Products, and (g) Marketing of Agricultural Products (Frick, Birkenholz, and Machtmes 1995; Frick, Kahler, and Miller 1991). Former participants highly regard their experience with 4-H programming, and attribute some of their life skills to lessons learned through 4-H programming and social networks (Ladewig and Thomas 1987). Though 4-H programs show promise for youth development, there is a need for expanding their offerings to wider audiences, provide more leadership opportunities for older teens, and ensure that programming is adequately challenging (Ladewig and Thomas 1987).

Summary

Youth development programs can take many different forms. Conservation corps are an example of a youth development programming that have showed success in developing job skills, improving employa-

bility and impact attitudes as well as, beliefs and behaviors concerning the environment. Service learning is an approach to youth development that relies on intention learning goals, active reflection, and reciprocal learning. Service learning programs are becoming increasingly common in higher education but little research has been done on impacts with younger youth. Lastly, youth development programs that work with urban agriculture projects can provide youth with an experience in nature, develop crucial life skills, improve academic competencies, and increase fruit and vegetable consumption. The AgriCorps program draws from elements of these three youth development program styles to provide an introductory work and learning experience for its participants. The next section will outline methods used in this study.

Chapter 3: Methods: Look, Think, Act: Community Based Action

Research

This thesis utilizes community based action research methodology to develop a case study of the AgriCorps program. Community based action research is, “rigorously empirical and reflective (interpretative), engage[s] people who have traditionally be called subjects as active participants in the research process, and results in a practical outcome for the lives or work of the participants” (Stringer 2007:xviii). A variety of methods were utilized to build this case study including: interviews with farm partners; qualitative analysis of program participant reflections and corpsmember evaluations; quantitative analysis of entrance and exit surveys and corpsmember evaluations; review program documents; and field observations. Looking at the program from a variety of angles provided a robust understanding of how it functioned and allowed me to make more informed program recommendations at the end of the project. It was important to involve all relevant stakeholder groups, which included full-time program staff, seasonal summer staff, farm partners, and program participants. Two core LCCC staff members were actively engaged with the design and implementation of data collection procedures. All research instruments were reviewed and approved by LCCC staff prior to their use in this study. Farm partner interviews and participant journal entries were especially valuable as their perspectives are vital in understanding the day-to-day functioning of the program.

Research for this thesis was informed by Stringer’s (2007) “look, think, act” model for action research. In the look stage, the researcher builds a picture of a community or organization by gathering relevant information. The look stage of this research was done in two tiers, one before the 2014 program session, which included a review of 2013 program documents and corpsmember surveys, and assisting with the development of 2014 program materials. The second tier of information was collected

during the 2014 summer program season and included the review of: entrance and exit surveys; reflection worksheets; project and activity evaluations; corpsmember evaluations; document analysis; participant observation; and farm partner interviews (Table 3.1). This two-tiered approach allowed me to reshape program documents, such as entrance and exit surveys and reflection worksheets, to provide insight into the corpsmember experience. Rather than relying the existing survey format, which provided little information about individual experience, I was able to rework surveys and design reflection worksheets that would provide more useful data. In the *think* stage each tier of data collected in the *look* stage was explored and analyzed to build towards a deeper understanding of the program. Finally, in the *act* stage, recommendations are presented to the organization to plan, implement, and evaluate what changes should be made.

Another key element of action research is the emphasis of practical outcomes for the partner organization. An important way community based research distinguishes itself from other research methodologies is through a conscious effort to conduct and report on research in a manner that is assessable to both professional practitioners and lay people (Stringer 2007:18). All data and associated analysis were shared with the partner organization and will be utilized in future program development and fundraising efforts. The results of this study were communicated to program staff through informal and formal meetings to discuss the findings and their implications. Additionally, the program staff reviewed drafts of this thesis, which includes relevant literature that can be beneficial to program development.

Look: Building a Picture

Data collection for the *Look* stage was collected in two tiers, one before the start of the 2014 program session, and another during the summer program season. The first tier of data collected helped build a

preliminary picture of the organization and its stakeholders. I reviewed all relevant organizational documents with information pertaining to the AgriCorps program to build a picture of the LCCC as an organization and AgriCorps as a program (Table 3.1). Documents analyzed during this phase included: 2013 entrance and exit surveys (16); 2013 program logs (compiled from the June and July session¹); 2013 environmental education evaluations; all environmental education activities used by crew leaders to structure education in the field (hundreds of activities from three primary sources: the Colorado Youth Corps Association COOL Guide; The Outdoor Odyssey; the LCCC Environmental Education Field Guide; and other sources both print and online housed at the LCCC). In addition to reviewing LCCC documents, I also reviewed a number of similar agriculture based youth development programs from around the country for information pertaining to mission statements, educational goals, and program activities. All of this document analysis was supplemented by conversations and meeting with LCCC staff to better understand goals and objectives of the organization and AgriCorps program specifically.

The second tier of data collection required a mixed methods approach of analysis of program documents and semi-structured interviews with farm partners. The organization requires that crew leaders administer pre- and post-season surveys, individual evaluations, and individual reflection worksheets throughout the season. These provided detailed information about participant experience in the AgriCorps program for this research. Interviews with farm partners provided insights into their experience with the AgriCorps program and background and motivation for involvement. I introduced this research project to introduced to the AgriCorps crew leaders and corpsmembers during new staff hire and to program participants at corpsmember orientation. At new staff hire, I explained how program documents will be used as data for this research project and coached the crew leaders on how to administer

¹ There are two sessions of the AgriCorps, one in June, one in July, in each program season.

surveys and reflection worksheets to ensure reliable data. I assisted the LCCC staff in the administration of the entrance survey during corps member orientation for both sessions. At this time, I introduced myself both as a representative of the LCCC and as a researcher at Colorado State University (CSU). I explained to the participants the importance of giving honest, thoughtful responses on the survey and in the reflection worksheets, stressing their role in assisting with program development. All other data, including corpsmember evaluations, project logs, reflection worksheets, and exit surveys were administered by the AgriCorps crew leaders. Though used in this research, primary purpose of these data sources was internal program development and evaluation. The LCCC has a general consent form that all program participants and parents sign that gives permission for the organization to use and share program documents including but not limited to photographs, surveys and evaluations that facilitated analysis of these documents for this research.

All participants were given an eight-digit identification code to use on all documents at the beginning of the session. This eight-digit number included crew code plus their six-digit birth date, unless there are two corpsmembers with identical birthdates, in which case, an alternative number was assigned. Logging data using an easy to remember corps member ID will be a useful tool for the LCCC in future seasons. The LCCC keeps corps member names and birthdays on file from which the corps member ID can be linked to individual participants.

Many different data sources helped answer individual research questions. Table 3.1 shows how the following data sources were applied to each research questions. Each data source is explained in detail in the pages following the table, and forms can be found in the appendices.

Table 3.1: Research Questions and Data Collected

	Research Question	Data Collected
Tier I	Question 1: What is the AgriCorps Program?	2013 corpsmember contract; 2013 crew leader handbook; grant applications; the LCCC website pages on history, goals, and specific program information; newsletters; 2013 project log
	Question 2: How does the AgriCorps Program operate?	2013 project logs; 2013 corpsmember evaluations; 2013 environmental education evaluations; compiled environmental education activities
	Research Question	Data Collected
Tier II	Question 2: How does the AgriCorps Program operate?	2014 project logs (2); 2014 corpsmember evaluations (16); farm partner interviews (4); participant observation
	Question 3: What are the goals and objectives of AgriCorps?	The LCCC website pages on history, goals, and specific program information; conversations with LCCC staff
	Question 4: What program activities support stated goals and objectives of the AgriCorps Program	2014 corpsmember evaluations (16); 2014 entrance and exit surveys (16); 2014 reflection worksheets (120); farm partner interviews (4); participant observation; 2014 project logs (2)
	Question 5: Does the AgriCorps program achieve the stated goals and objectives?	2014 entrance and exit surveys (16); 2014 reflection worksheets (120); farm partner interviews (4); participant observation
	Question 6: How does service learning support the achievement of these goals and objectives?	2014 reflection worksheets (120); farm partner interviews (4); participant observation
	Question 7: What is unique about AgriCorps—Why Farms?	2014 reflection worksheets (16); farm partner interviews (4); participant observation

Project logs: Crew leaders detailed daily activities in a project log. Projects or tasks completed by the AgriCorps were grouped into the following categories in project logs: planting, transplanting, direct seeding, harvesting, mulching, weeding, other projects. I combined planting, transplanting, and direct seeding into a single category planting to simplify analysis. Project log data consists primarily of tasks

quantified by row foot planted, weight of produce harvested or cubic yardage moved. Time spent engaged in each task was not recorded in the project logs. Each farm was given a three-letter code. Tasks were separated into five categories to assist with internal program evaluation.²

Corpsmember Evaluations: Corpsmembers completed self-evaluations and goal setting activities along with staff evaluations completed by crew leaders at two or three points during the season. During orientation, corpsmembers write down three goals and complete a self-evaluation. The self-evaluation contains 17 questions in five categories relating to leadership, personal growth, professionalism, adherence to safety protocol, and teamwork and work ethic. The questions were scaled using the following four categories: Exceeds Expectations; Meets Expectations; Requires Improvement; and Unacceptable. Crew leaders conduct corpsmember evaluations and fill out a staff-evaluation at the mid-point during the season. The staff evaluation contains 28 questions in the same five categories and same four-point scale as the self-evaluation. Crew leaders complete their staff evaluation prior to meeting with the corpsmembers. During the formal evaluation, crew leaders compare their staff-evaluations to the corpsmembers' self-evaluations and discuss the progress towards stated goals and overall performance. At the end of the seasons corpsmembers complete a final self-evaluation and reflect upon program performance and goal achievement. Crew leaders complete a final staff evaluation during the last week of the program session giving final feedback to corpsmembers and noting recommendations for future employment with the LCCC when appropriate (See Appendix E).

Entrance and Exit Survey: An entrance and exit survey was administered during corpsmember orientation and on the last day of the program. Entrance and exit surveys were drafted to be applicable to all

² Project logs were completed electronically, and blank template is not included in an appendix

LCCC program areas and included both scaled response and open-ended questions about participant background, workforce readiness, community engagement, and environmental attitudes and behaviors. A majority of the questions in the entrance and exit survey were kept the same to observe any changes in individual responses. Background questions in the entrance survey were substituted for questions about post-corps employment plans in the exit survey. Scaled-response questions pertaining to workforce preparedness, community engagement and environmental attitudes were on a five-point Likert scale ranging from strongly agree to strongly disagree. One set of 10 scaled-response questions was on a four-point frequency scale (never; sometimes; often; always) and was used to assess health and conservation behaviors (See Appendix D for survey instrument).

Reflection worksheets: AgriCorps participants completed reflection worksheet activities throughout the season as required by the program. Reflection worksheets were administered during orientation, after structured educational activities, during the last two weeks at each project and after filling out the exit survey. Activity and project worksheets followed a similar format with asking participations to briefly reflect on their experience in one word, and then in several sentences about what they learned in the following four categories: About food and agriculture; About yourself; About working with others; and About service in your community. Additionally, they were asked to reflect on how they will use what they learned both in their day-to-day life and when applying for a job. Entrance and Exit reflection worksheets included a similar set of reflection questions to the activity and project worksheets as well as a set of questions regarding food system knowledge. These questions included: “Please list, draw or diagram the steps in the food system”; “What does CSA stand for? Can you list any CSAs?” “What is a community Garden? Can you list any local community gardens?” and “Do you shop at the farmer’s market? Can you list any local farmer’s markets?” Questions used in reflection worksheets were unique to this

project and were designed to guide reflection and provide insight into corpsmember experience (See Appendix F).

Interviews: Semi-structured interviews with four of the six farm partners were conducted to better understand their role in educating participants in the AgriCorps program. LCCC staff approved interview questions, contacted farm partners to inform them that a researcher would be contacting them, and were given copies of interview transcripts. Each interview lasted approximately one hour and took place at either the farm or garden site, or another specified location. Interviews gave the farm partners and opportunity to share their experiences hosting the AgriCorps crews, to talk about variation in crew dynamics, and to offer feedback and suggestions as to what worked well and highlighted areas for improvement. All but two of the farm partners interviewed for this project have worked with the AgriCorps for all three years the program has been in operations. Many of these farm partners had worked with the LCCC prior to the establishment of the AgriCorps and provided insight into the successes and challenges of the AgriCorps program (See Appendix A for interview guide).

Participant Observation: Participant observation gave an opportunity to experience how the program was implemented in the field. Formal field observations were conducted on four specific occasions, at four of the six farms for a total of 15 hours. Jottings were taken on a small notebook in the field, and compiled into detailed field notes within two hours of the observation period. Field observations gave increased insight into crew dynamics, approaches to education in field, crew leader interactions, and corps structure. In addition to formal field observations, I interacted with the crew on additional occasions during the season as a farm partner and as part of my responsibilities as an intern with the LCCC. I introduced and administered the entrance surveys during orientation, worked with the crew as a farm partner at a local community garden, and attended end of season celebrations. Corpsmembers and crew

leaders were familiar with me and my presence in the field during observations did not appear to be disruptive.

Think: Organizing and Analyzing the Data

The *think* stage of this research involved the organizing and analyzing of the data gathered during the *look* stage. The task during this phase of action research is to, "interpret and render understandable the problematic experiences being considered" (Stringer 2007:96). The key problems explored were: in tier one, "how is data being collected about the AgriCorps program?"; and in tier two, "what are the achievements of AgriCorps program, as a LCCC program, and more broadly as a youth development program?" This research involved an organizational review framework for analysis. In an organizational review, questions regarding vision and mission, goals and objectives, organization structure, operations, and problems, issues, and concerns are discussed with the stakeholders (Stringer 2007:110). Analyzing the organizational structure with a focus on goals and objectives helped in addressing the key problems. Interpretation in action research is characterized by the use of, "experience-near concepts—terms people use in their everyday lives to describe events, rather than theoretical concepts derived from the behavioral sciences—to clarify and untangle meanings and help make sense of the case" (Stringer 2007:96). Because different stakeholder groups have different experiences and perspectives on issues, analysis of each stakeholder group are kept separate in initial phases of analysis and larger concepts applied at later stages. In addition to input from stakeholders, records and documents are also incorporated to build a more robust understanding of the problems being addressed through this phase of research (Stringer 2007). Analysis was again done in two tiers, one prior to the start of the 2014 program season, and one during and after it.

First tier data was reviewed to build a base understanding of the structure and goals of the organization and to document how program data was at that time being collected. First tier data included:

program documents including the 2013 corpsmember contract; 2013 crew leader handbook; grant applications; the LCCC website pages on history, goals, and specific program information; newsletters; and 2013 project log data. I interned at the LCCC during this time and was tasked with restructuring the crew leader handbook to include a service learning curriculum, revising entrance and exit surveys, and developing new tools to better capture learning outcomes. During the five-month internship I participated in weekly staff meetings, facilitated a meeting on service learning, and had regular check-ins with the corps manager to discuss my internship experience and to address any questions about the organization or the program that I was struggling to understand. In addition to the collected data, these workplace interactions helped to inform my understanding of organizational and program structure. The main objective for the first tier analysis was to understand how surveys, reflections, and evaluations could be restructured to best serve the purposes of both internal evaluations by the LCCC and to build a robust understanding of corpsmember experience for this research.

Second tier data analysis occurred during the summer 2014 program season and involved additional stakeholder groups including: program participants; crew leaders; and farm partners. Second tier data included: 2014 corpsmember evaluations; 2014 entrance and exit surveys; 2014 reflection worksheets; farm partner interviews; participant observation; and 2014 project logs. The second tier of data was collected and analyzed after the official end of my internship with the LCCC. Throughout the summer, I regularly interacted with the corps manager and development associate while entering data at the LCCC office and via email. I did not, however, attend weekly staff meetings and had fewer opportunities to engage with seasonal program staff about their experience as crew leaders. My involvement as a farm partner and participation in crew leader and corpsmember orientations did provide some opportunities to observe and interact with seasonal program staff, but was not as robust as originally envisioned. My ability to formally observe both sessions of the AgriCorps program was impeded by an unex-

pected delay in approval of an amendment to our approved IRB protocol. We submitted the amendment in late April, but did not get an official approval from the IRB office until mid-July; a result of staff turnover in the IRB office, and not the fault of the research team. This delay in approval prevented me from making formal observations during the first session of the program. Second tier data collected during the 2014 summer season was analyzed to better understand how the program is achieving their goals and objectives.

Qualitative Data Analysis: Raw data from participant documents (reflection worksheets and goal-setting activities) were transcribed, read through, and entered into excel or word before being uploaded into Dedoose for analysis. Participant documents were separated and analyzed by type: activity reflections (47); project reflections (46); and entrance and exit survey reflections (32), and goal-setting exercises (40). Codes were derived using the general inductive approach as outlined by Thomas (2006). I first read through all of participant documents making notes about the themes that as they were emerging. During the second read through, common phrases or experiences were given a code, resulting in more than 35 core codes and an additional 22 sub-codes. During the third reading these codes were winnowed into six concrete categories: knowledge; professional development; soft skills; personal development; and program insights (see Appendix C). These final coding categories were utilized to help structure analysis around the achievement of program goals and objectives. Each of these sources provided varying levels of evidence related to different program goals. For example, activity worksheets, orientation, and exit reflections provided more relevant data on knowledge, while corpsmember self-evaluations provided more insight into soft skill and professional development.

Farm partner interviews were also analyzed using the general inductive approach. The four farm partner interviews provided such a small quantity of data that coding was not completed in Dedoose.

Rather transcripts were read carefully read through a number of times, and important insights shared by the farm partners were highlighted. Later, code for farm philosophy, expectation for corpmembers learning and work ethic, introduction to the AgriCorps, teaching in the field, program recommendations, and best practices were applied to each of the highlighted section. Lastly, quotes were compiled into a separate document under the appropriate code for use in the final report.

Quantitative Data Analysis: Scaled response questions on entrance and exit surveys and staff evaluations were analyzed in excel and visualized using package '*Likert*' in statistical Program R (Bryer and Speerschneider 2015; R Core Team 2015). Individual questions were grouped by the categories they appeared under on the survey or evaluation. There were three sets of five-point likert scale questions ranging from strongly agree to strongly disagree were including: five questions related to workforce preparedness; four to community engagement; and 15 to environmental attitudes. One set of 10 questions related to healthy and environmentally conscious behaviors used a four-point frequency scale (never; sometimes; often; always) in the survey. The staff evaluations included 28 questions that used the following 4-point scale: Exceeds Expectations; Meets Expectations; Requires Improvement; and Unacceptable. Visualizations created using this package showed change in frequency of scaled responses, which highlight how attitudes, beliefs, behaviors, and skills may have been impacted by program participation. All likert and likert-type data was entered with a numerical value: strongly agree was given a 5, and strongly disagree a 1 on the likert scale questions on the survey; and exceeds expectations a 4, meets expectations a 3, requires improvement a 2, and unacceptable a 1 for the evaluations. I subtracted the entrance or mid-season score from the final score to calculate change. I then counted the number of participants with positive change, no change, and negative change for each question and summed the

totals. Lastly, I divided that number by the number of participants and calculated averages for each category. Package 'Likert' was designed to summarize and visualize categorically scaled data with greater accuracy than using stacked bar charts or pie charts in programs such as excel (Bryer and Speerschneider 2015). This program also allows for the comparison of two categories of data, such as 'entrance' and 'exit', in one chart to better visualize change.

Act: Planning and Implementing

The two tiers of data collection and analysis lead to two specific action phases: first to refine program evaluation instruments used by the LCCC to produce higher quality data; and second to provide detailed documentation of the program to better understand strengths and weaknesses. The first of these happened prior to the start of the program in the spring of 2014, and the second in the fall after the completion of the program season.

To refine program evaluation instruments, I worked closely with the LCCC development associate to recreate entrance and exit surveys and develop new methods to capture narratives about the corpmember experience. One of the major changes to evaluation instruments was introducing an identification code to all corpmember documents to be able to track individual level change. Previously all data collected by the organization was anonymous which prevented commentary on individual change. The survey were designed in attempts to quantify participants experience and attitudes related to the following three organizational objectives: personal and professional development; community engagement; and environmental awareness. Survey questions were a mix of open ended and scaled-response questions. The entrance survey contained seven open-ended questions about the participant's educational and occupational goals and other demographic information. The scaled response questions were included to attempt to address change in attitudes about workforce readiness, community engagement, and environment as a result of participation in the program. There were five scaled response questions

about workforce readiness, four about community engagement and 15 about various opinions about environmental issues covered in the curriculum. There were an additional 10 scaled response questions to assess healthy habits and conservation behaviors. Participants were asked to list extracurricular activities, regular volunteer opportunities, and one-time volunteer opportunities that they are involved in and estimated time spent each month engaged in each activity. This provided a glimpse into how participants spend their time in the community. In addition to community activities, we also had participants list what outdoor activities they regularly engage in and approximately how many hours per month they spent engaged in these activities. Questions for this survey were inspired by surveys designed for other conservation corps (Duerden et al. 2011; Hoffman 2004; Martin 2013; Miller 1998). The exit survey was similar to the entrance survey, but with a different set of background questions that focused on post-program employment plans.

The LCCC re-introduced more structured opportunities for reflection during the 2014 season. The LCCC had in the past provided journals and required that crew leaders give their crews opportunities for individual reflection throughout the season, but had moved away from this in recent years. It was important for this research to have access to the narratives drafted by the corpsmembers. Other research on conservation corps have utilized photo copied pages of corpsmembers journals which are turned in at the end of each week (Hoffman 2004). Rather than trying to coordinate with crew leaders the turning in and return of corpsmember journal, I created simple reflection worksheets that could be given out after activities and at various points in during the program season (Appendix E). These reflection worksheets all had similar format with additional questions in the entrance and exit reflections about general food system knowledge and corpsmember experience. The consistent format aided in analysis of reflection data. The final design of these worksheets was unique for this LCCC and was developed to encourage program participants to regularly reflect on how program elements related to the

organizations interest in professional/personal development, community engagement, and environmental awareness. Project and activity reflection worksheets had questions to provoke responses about how the activity or project they were reflecting upon themselves, their community, working with others. These worksheets helped identify what specific activities and tasks on the farms were helping participants to increase their awareness of local agricultural projects and support community engagement.

A new corpsmember evaluation was utilized this season after having been adapted from another regional conservation corps. This evaluation assessed corpsmembers growth in a range of soft skills including: leadership; personal growth; professionalism; safety practices; and teamwork and work ethic. The new corpsmember evaluations also provided structure for corpsmembers to set goals and reflect upon their progress throughout the term. This gives corpsmembers an opportunity to self-evaluate their personal development throughout the season. Crew leaders were required to complete a mid-season and a final evaluation on each corpsmember. Corpsmembers were to complete three goal-setting exercises and two self-evaluations during the season. Because of the new corpsmember identification code system, corpsmember evaluations, reflection worksheets, and entrance and exit surveys could be matched to provide a deeper understanding of individual corpsmember experience.

Findings presented in Chapter 4 of this thesis served as the primary means of documenting program strengths and weaknesses and provide a foundation for recommendations made to the LCCC. After the end of the data collection stage, I met with the development associate to discuss some of the themes I had been observing and to hear their perspective prior to drafting the findings section of the thesis. The corps manager and development associate were given an opportunity to review the first draft of this thesis and provide feedback that was incorporated into later drafts of the paper. A meeting was held with the corps manager and development associate to present my findings and recommendations in October of 2014. Recommendations based on this stage of the research will be presented in Chapter 5 of this thesis and in Appendix H.

Chapter 4: Findings

The following section will be structured around the following seven research questions:

Question 1: What is the AgriCorps Program?

Question 2: How does the AgriCorps Program operate?

Question 3: What are the goals and objectives of AgriCorps?

Question 4: What program activities support stated goals and objectives of the AgriCorps Program

Question 5: Does the AgriCorps program achieve the stated goals and objectives?

Question 6: How does service learning support the achievement of these goals and objectives?

Question 7: What is unique about AgriCorps—Why Farms?

Addressing these questions will provide insight into how the program functions, its goals and objectives, and success at meeting the stated goals and objectives. Question seven will provide some context as to how working on farms is relevant to youth development.

Question 1: What is the AgriCorps program?

I reviewed program documents such as the corpsmember handbook, service learning curriculum, grant applications, LCCC and Larimer County Workforce Center webpages, program brochures, and organizational newsletters in efforts to define the AgriCorps program. My understanding was also informed by my experience as a graduate intern assisting with program development in spring 2014, and as a crew leader for the AgriCorps program in the summer of 2013. The AgriCorps program of the Larimer County Conservation Corps (LCCC) is defined on the website and in brochures as a volunteer-based program through which youth, ages 14-16, engage in projects on local farms that support low-income families in Larimer County. The LCCC assert on their website that, “through these service learning projects, participants are exposed to work skills and learn how to be involved within their community”(LCCC 2014). Participants are contracted to work half days, 7:30am-12pm, Monday-Thursday. There are two four-week sessions of the AgriCorps program, one in June and one in July. This is a significantly shorter commitment than the Land, Sawyer, or Recovery programs of LCCC, which run eight to ten weeks and

have eight to ten hour workdays. Corpsmembers receive a small stipend at the end of their four weeks of service. LCCC program staff commented on how the AgriCorps program is the most public of the LCCC program areas, with crews working primarily at public gardens and urban farms. Land and Sawyer crews work primarily in remote location of public wilderness areas. Funding for the program is a mix of grants and income from other programs supported by the organization.

The AgriCorps program was developed as a way to provide workforce experience to younger teens that would ease the transition into the workforce. The AgriCorps program is designed as an introduction to the hiring process, workplace expectations, and as an opportunity for soft skill development. Corpsmembers learn how to work in teams, follow directions, and adhere to employer expectations, leadership, and the value of hard labor through work on local farms. Participants also complete an application and interview process before acceptance into the program. The LCCC's is affiliated with the Larimer County Workforce Center's Youth Services division, which influences their emphasis on teaching employment skills. Youth Services encompass a variety of programs designed help youth navigate the labor market through job search and application assistance, career counseling, and internship and job placement programs for youth ages 14-21. The AgriCorps program allows the LCCC to serve the entire age range served by Youth Services. Additionally, the AgriCorps program introduces younger youth to the kind of work done in other LCCC programs to which they may later apply.

Question 2: How does the AgriCorps program operate?

Analysis of program documents such as the corpsmember handbook, service learning curriculum, and participant observations during crew leader and corpsmember orientations and during the program season informed my understanding of how the AgriCorps program operates. There are two eight-

member crews during the summer program season, each of which participates in a four-week long session. Corpsmembers complete a one or two-day orientation where they are introduced to program expectations and goals. After orientation, crews begin work urban agriculture projects in Larimer County. Each day starts with a stretch circle and discussion of safety concerns. After the stretch circle the crews are assigned tasks from the farm partner. Crews are often broken into small groups that work together on a variety of projects on at the farm or garden. Tasks generally include weeding, harvesting, planting, and general maintenance. Some farm partners have the crew work on larger infrastructural projects like fence repair, ditch clearing, or mulch spreading. Corpsmembers work under the supervision of either the crew leaders or staff at the host farm or garden.

One crew leader and one crew mentor carry out AgriCorps program activities. The crew leader is responsible for a variety of tasks such as: nurturing relationships with farm partners; structuring daily debriefs; assigning tasks; motivating crew members; conducting regular evaluations; conflict resolution; discipline; and coordinating educational activities from the service learning curriculum. The crew mentor assists in all of these activities, but does not have disciplinary authority. There is a two-week training period for this position at the beginning of the summer season. During this training crew leaders and crew mentors are introduced to the history of the LCCC, corps culture, the service learning curriculum, leadership development, and complete a three-day course wilderness first aid and CPR. Additional time is set-aside for the crew leader and mentor to discuss roles and plan service learning activities for the season. The corps manager, development associate, and program coordinator are responsible for hiring crew leaders, selecting farm partners, program design, and evaluation.

All participants submit an application, many include a resume and cover letter and all complete an interview with an LCCC or Larimer County Workforce Center staff person. The application contains general background questions including: household size; participation in government assistance programs; educational history; community service; work experience; references; and an option to upload a

resume or provide any additional documents. Larimer County Work Force Center and LCCC staff that are trained to conduct the interviews with sensitivity to the newness of the interview process for participants conduct interviews with prospective program participants. LCCC staff members select corpsmembers by evaluating interview responses and application materials for interest in the program and desire to gain work experience. The organization pays special attention to diversity and crew dynamics when making final selections, striving for a balance of participants with different backgrounds and experiences. Applicants select either the June or July session and give a verbal commitment to be present for all 16 scheduled days of work during the interview process. All applicants are required to complete 80 hours of service over the four week AgriCorps term and are responsible for making up missed hours by volunteering at approved local organizations, often partner farms.

All LCCC programs have similar expectations for use of a service learning curriculum that highlight three areas of importance for the LCCC: personal and professional development; community engagement; and environmental awareness. Professional and personal development occurs in a variety of different ways in the field and through workshops. AgriCorps participants complete a resume workshop in the last week of the program in which they learn to summarize their program experiences in terms of hard and soft skill development and draft a resume. All crews are required to complete some form of community engagement activity which will give crew members a framework for thinking about how their work impacts the community as a whole. The environmental awareness section of the curriculum focuses on relevant environmental issues including: water; fire and forest health; ecosystems; environmentalism; and food systems. The AgriCorps crew completes several activities from the food systems section of the curriculum as part of the program efforts to promote environmental awareness.

As part of the service-learning curriculum, corpsmembers complete a variety of group and individual reflection activities. Group reflection occurs at the end of each workday through a daily debrief

exercise facilitated by crew leaders. Individual reflection worksheets are completed after activities, project, and at the beginning and end of the program session. Corpsmembers also complete a goal setting activity alongside their self-evaluation at two or three points during the season in which they reflect upon their personal growth through the program.

The June and July sessions had some differences including: orientation, types of farms visited; tasks completed; and educational activities completed. These differences are a result of the two sessions occurring at different times during both the summer program season and growing season. Table 4.1 displays these differences in programming between the two programs.

Table 4.1: Program Session Details

	June Session	July Session
Age of members	(14) 2; (15) 4; (16) 2	(14) 3; (15) 4; (16)-1
Number of returning members	2	0
Gender	2 female; 6 male	2 female; 6 male
Type of Urban Agriculture Projects	3 public gardens; 1 private farm	2 public gardens; 2 private farms
Service Learning Activities Completed	What is community? Bee and native plants; Food Bank tour; Label reading activity; resume workshop	What is community? Food system activity; Farmer talk (x2); resume workshop
Most Commonly Completed Tasks	<u>Planting</u> ; weeding; other projects	<u>Harvesting</u> ; weeding; other projects
Orientation Style	Combined with other LCCC programs (3 land crews)	AgriCorps specific

I was present for parts of the both sessions orientation and reviewed schedules and photographs for both sessions. The first session completed orientation along with the three land crews the week before the official start of the term. This orientation was overseen by LCCC staff and was designed to introduce corps programming to all new participants. The first session crew also was able to join the land crews at the ropes course and spent an entire extra day on team building exercises. Because the

orientation for the second term fell in mid-July after the other LCCC programs were under way, the second session receive a special orientation coordinated by the two AgriCorps crew leaders. This orientation was specific to the AgriCorps and included an educational presentation that gave background information on the AgriCorps program and introduced the participants into some basic concepts about the food system. This orientation was held on the first day of the workweek rather than a week prior to the term and included fewer team building activities than were completed during the full orientation the June corpsmembers attended. Fewer production farms were selected as farm partners than community gardens in 2014 because they often lacked clearly defined education goals and objectives to support the mission of the program. Farm tasks vary by season with June being more focused on getting plants in the ground and July having more opportunities to help with harvest. Lastly, crew leaders catered educational activities based on the perceived interests of the corpsmembers and timeline of the projects. The first crew did more structured educational activities, while the second had more talks with farm partners.

Question 3: What are the Goals and Objectives of the AgriCorps Program?

The Larimer County Conservation Corps has defined the following three organizational goals to guide the structure of individual programs. The goals are listed in the service learning curriculum and shared with crew leaders at the beginning of each program season. All LCCC program activities should relate back to these goals. Program objectives were drafted by the LCCC corps manager, development associate, and the director of youth services and shared with me via email for the purposes of this evaluation. The LCCC's goals and AgriCorps program objectives listed below were drafted by organization and not changed for purposes of this research.

Goal One: To promote self-sufficiency in youth and young adults through skill development for personal and professional growth. **[Personal and Professional Development]**

- *Objective 1a: Post service, 80% of corpsmembers leave prepared to speak about their service and have a tangible record (resume) of their term*
- *Objective 1b: By the end of their term, 75% of corpsmembers show growth in transferable personal and professional skills**

Goal Two: To increase participant’s knowledge and awareness of community and environmental issues through education and service learning. [**Community Engagement and Environmental Awareness**]

- *Objective 2a: By service completion, 70% of corpsmembers show an increased interest in environment and/or community*
- *Objective 2b: Throughout the summer, expose 16 youth to the local farm community by way of various service projects**

Goal Three: To complete meaningful and long lasting conservation projects in Northern Colorado that benefits our environment and community.

- *Objective 3a: By the end of their service term, each corpsmember will complete 80 hours of service on local farms/gardens**

The objectives above are as drafted by the organization and are not as clearly defined nor measurable as I would have suggested for the purposes of this research. Objectives 1b, 2b, and 3a were drafted by the LCCC, but omitted from the final list used for internal evaluation by the organization. I have retained them here because they provide greater direction when analyzing achievement of goals and objectives in Question 5.

Question 4: What program activities support stated goals and objectives of the AgriCorps Program

I drew upon program documents such as project logs, the service learning curriculum and reflection worksheets, participant observations, and farm partner interviews to better understand how various program activities related to the stated goals and objectives. The following section outlines how specific program structures and activities support each goal and objective. Whether these goals and objectives were achieved will be addressed in the next section.

Goal One: To promote self-sufficiency in youth and young adults through skill development for personal and professional growth.

- *Objective 1a: Post service, 80% of corpsmembers leave prepared to speak about their service and have a tangible record (resume) of their term*
- *Objective 1b: By the end of their term, 75% of corpsmembers show growth in transferable personal and professional skills*

The program structure of the AgriCorps promoted professional and personal development in a number of ways. The LCCC was specifically interested in assessing were the ability to speak about the service completed during the program and presence of a tangible record of service, and growth in transferable personal and professional skills. The development associated commented that these goals came directly from research on the barriers to youth employment. This goal and objectives were addressed through the following program elements: corps structure; corpsmember evaluations; resume writing; and hiring process. These four elements are detailed below.

Corps Structure: Corps structure was observed during participant observations in the field, through analysis of the corpsmember handbook, and my experience as a crew leader in 2013. Conservation corps adhere to a general structure that promotes professional and personal development. Much of this is grounded in an unspoken corps culture that crew leaders gain familiarity with through staff training and their own corpsmember experiences. The crew mentor is typically a former LCCC corpsmember and crew leaders often, but not always, have experience as a corpsmember, though not always with the LCCC. Examples of program elements that stem from a general corps structure include: uniforms; daily routines; role taking; and safety protocol. This structure is a defining feature of the program for both participants and farm partners. Corpsmembers were asked to describe a day in the life of a corpsmember in their entrance and exit survey. Corpsmembers completed the entrance survey at the end of their orientation to the program and left remarks such as, *“I think a day in the life would look like us arriving at the farms, being assigned jobs, then rotating the jobs through the day then going home and taking a*

nap!” At the end of the program 31% of participants described elements of the corps structure in the descriptions of a day in the life on the exit survey. One corpsmember gave a detailed description of daily activities in the exit survey that highlight the corps structure:

Wake up get ready to be at the meeting spot by 7:20-25, go to our farm for the day, start with stretch circle. Start with whatever job they put to you like weeding, harvesting, planting, act. Have 15-minute break at 10am, at 10:15 go back to work turning compost, weeding, bundling veggies, harvest etc. 12 highs/lows circle then go home

Another participant similarly described the corps structure, “get in the can, go to the farm, stretch circles, weeding, other work, debrief, go home”. Where these corpsmembers were able to identify the presence of a corps structure, some of the farm partners were able to comment on the significance of these structures. In an interview, one farm partner praised the corps structure in saying:

I have tremendous respect for the Conservation Corps. So when the AgriCorps youth arrive they already know the ground rules. They already come dressed appropriate, they come with their gloves, they come ready. They already know what the rules are for conduct. That’s phenomenal from my standpoint. We help reinforce it, we remind them to put their gloves on and so forth, but the AgriCorps does a tremendous job at providing the structure and expectations and a container for them to then work.

The *container* that the farm partner describes is created by clearly communicating expectations for conduct during orientation and reinforced by crew leaders and farm partners throughout the season throughout the season. The LCCC’s code of conduct is outlined in in the corpsmember handbook, which is carefully reviewed with all participants during orientation at the beginning of the season. The Corps-member Handbook outlines appropriate conduct, dress code, workplace safety, and disciplinary actions. All corpsmembers are required to sign a statement of understanding at the end of orientation that they have read and understand the code of conduct. There are repercussions for failure to adhere to the rules outlined in this handbook, which can result in dismissal from the program. In this way the corps structure teaches participants about accountability in ways that youth agricultural programs such as school gardens do not.

The corpsmember handbook outlines a dress code that requires that all corpsmembers wear a uniform consisting of kaki or brown pants, a clean LCCC t-shirt, ankle high boots, gloves and eye protection when appropriate. Corpsmembers are also expected to protect themselves from the sun and heat by wearing a hat and sunblock and to stay hydrated by bringing an appropriate amount of water to work with them. Corpsmembers are assessed for their compliance with the dress code in their corpsmember evaluations and there are penalties for non-compliance outlined in the handbook. Uniforms promote safety, team cohesion, and professionalization.

Daily routines help participants distinguish between work time, where the emphasis is on productivity, and break time where the emphasis is on socialization and reflection. Some of the daily routines that I observed included arriving at a set time, at a set location, having set break times, and opening and closing circles. Crews leave from a central location and corpsmembers must be present when the crew leaders are set to depart or risk being left behind; tardiness is not accepted and repeated absences without prior notification is cause for termination. Once at the host farm, crews start their day with a stretch circle where they answer an ice breaker question and list a safety concern relevant to that farm or garden. The ice breakers are either questions about personal background, aspirations, or silly questions chosen to break down barriers between corpsmembers and promoting cohesion among the crew. They then move all personal belongings to a safe, out of the way, location and begin work. There is a mid-morning break and a final closing circle at the end of the day. Crew leaders led participants in a daily debrief during the closing circle where they discuss the highs and lows of the day and complete a project log with tasks completed. High points referenced during my observations were most often related to a new knowledge gained, or finishing a project or goal and low points were frequently related to heat or repetitive tasks such as weeding. Time sheets are completed on the van ride back to the drop off location. Participants commented in reflection worksheets and goal setting activities on how daily rou-

tines such as these help prepare them for the workplace. Other participants set goals related to workplace expectations like, “*coming to work every day and on time,*” and to get, “*experience with teams and time sheets.*” Seemingly unimportant tasks, such as filling out time sheets, are all the more relevant given that the AgriCorps is the first work experience for many participants.

Another part of the corps structure is assuming a variety of roles on the crew. Crew leaders are encouraged to define roles for corpsmembers during staff training and to find ways to engage their crew with these roles during the season. These roles are assigned to corpsmembers at the beginning of the week include things such as keeping track of time, reminding the crew to stay hydrated, cleaning up the van, photo documenting the day, or lightening the mood and encouraging conversation in the field. During my field observations I noticed that corpsmembers engaged to differing degrees with these roles. Some corpsmembers were enthusiastic about their role, regularly giving affirmations or reminding corpsmembers to stay hydrated, while others only engaged with their roles only when encouraged by their crew leaders. Taking different roles provides the corpsmembers opportunities to take responsibility and demonstrate leadership. Corpsmembers did not discuss the different roles in their activity reflections or goal setting exercises.

As a conservation corps, the LCCC has strict safety protocols in place to ensure the safety and wellbeing of all program participants. At the beginning of each shift, program participants list safety concerns. Safety concerns listed during my field observations included: heat and hydration; insects; tripping hazards; proper tool use; and light-hearted responses about getting distracted by the dogs. Though many of the safety concerns were similar at each site, there were some differences based on weather and environment, which showed that corpsmembers were learning to pay attention to changes in their environment. This is important for this age group which may have had fewer opportunities to think about how their environment impacts the how they are able to execute their job safely and effectively. Corpsmembers are provided with gloves and eye protection at the beginning of season. Corpsmembers

are taught about safe usage of tools and crew leaders supervise all activities that pose any safety risk. Exposure to the sun and hydration are also important safety concerns that are reiterated during the season. Applying sunscreen and bringing enough water to last through hot days are some of the more common safety protocols I observed while the crew was at my site, and something that corpsmembers are able to hold each other accountable for.

Performance Evaluations: Corpsmembers receive regular feedback on their performance through self and staff evaluations. Corpsmembers set three goals and complete a 17 question self-evaluation on five categories at two or three points each season. Crew leaders complete a similar staff evaluation with 28 questions in the same five categories. Each corpsmember will have a check in with their crew leaders at the middle and end of each season during which corpsmembers will have the opportunity compare their self-evaluations to that of their supervisors. Crew leaders discuss any concerns and give positive feedback where appropriate during these check-ins and document key themes in the comment section of the staff evaluations. These regular check-ins give participants a chance to start to think about goals and how to achieve them and gives them a chance to receive and respond to feedback. One of my field observation days occurred during the final evaluation of the Corpsmembers. Corpsmembers would leave the task they were working on for upwards of 20 minutes to go sit with their crew leaders and complete the individual evaluations. Several corpsmembers joked with one another about crew leaders collecting blood and urine samples after returning from the evaluations, making light of a potentially stressful evaluation. Corpsmembers likely have not experienced this kind of one on one performance evaluation and provoked some nervousness from corpsmembers during my observation. From my own experience as a crew leader in 2013, the one-on-one evaluations provoked a great deal of anxiety from some participants. These evaluations also provided an opportunity to reprimand poor behavior in a less public set-

ting. Having the opportunity during mid-season evaluation to voice concerns and reinforce program expectations seemed to help many corpsmember redirect their energy and improve their overall program performance. The individual evaluations also provided me as a crew leader the opportunity to praise and encourage shy participants into taking on more leadership roles and actively participating in team activities. In my experience, and from my observations, the tone of these evaluations is overall very positive and encouraging.

Crew leaders left general comments, noted the corpsmembers greatest strengths, and made comments about the area the corpsmember could grow/continue to work on. Two examples of comments left by a crew leader in the mid-season evaluation are:

*Greatest Strengths: Following instructions well and great work ethic; Great team player
Continue to work on: Stepping into more leader role and pushing his boundaries; Working on inclusion*

*Greatest Strengths: creative and open/honest attitude; great goal setter
Continue to Work On: stepping out of comfort zone and trying new things; asking more questions; putting herself before others*

Crew leaders were again asked to comment on the corpsmembers greatest strengths and to discuss what they could continue to work on. Crew leaders most often noted that corpsmembers needed to continue to work on inclusion and developing leadership skills in their final comments. Below are two examples of final comments left by crew leaders:

*Greatest Strength: Made connection between home and work life; Honesty and openness; Would love to see her in her element; Greatly improved work ethic
Continue to Work On: Including herself more and keep pushing herself*

*Greatest Strengths: All around great kid, great work ethic, great leader; can't wait to see what else does with future; really took on the leadership role; **Highly recommended for the AgriCorps and land crews in future
Continue to Work On: Keep speaking up and leadership role; Work on goal setting abilities*

Lastly, crew leaders were given the opportunity to recommend the corpsmember for future employment with the AgriCorps. The AgriCorps program was described to me as being a feeder program for

other LCCC program areas. Many AgriCorps participants will go on to apply for positions on the Land or Sawyer crews and the comments left by their crew leaders on these evaluations will be taken into account.

Resume Writing Workshop: Participants completed a one-hour long resume-writing workshop led by a trained member of the Larimer County Workforce Center's Youth Team. I did not participate in these workshops and learned about them through participant reflections about the workshop and conversations with LCCC staff. At this workshop, participants learned how to translate their service experience into a working resume, how to format a professional resume, and the important role this document plays the hiring process. Five participants commented in the exit survey that the importance of having a resume was the most important take away related to getting a job from the experience in the program. The responses on the reflection worksheet for this activity revealed that participants didn't really understand what information should be included or excluded on a resume and left the workshop feeling more confident in their ability to write a professional resume when applying to future jobs. All participants felt this activity should be repeated. Leaving with a tangible record of service (objective 1a) is one of the few concrete objectives for the program.

Hiring Process: All applicants submit an application and statement of interest, complete an interview, fill out paperwork, and attend an orientation prior to starting the AgriCorps program. I gained familiarity with the hiring process through my positions as a crew leader in 2013 and graduate intern in 2014. As a crew leader in 2013, I reviewed application packets, interviewed prospective corpsmembers and assisted with participant selection, and assisted with interviews in 2014. The application includes general

background questions, questions about household size and participation in government assistance programs, educational history, community service, work experience, and references with an option to include a resume, and provide any additional information and statement of interest. All interviews were completed by trained LCCC and Workforce Center staff that are familiar working with youth and sensitive to the fact that it was many interviewees first time being interviewed for a position. The interview process was impact for one corpsmember who included interview skills on new lessons they learned about how to get a job in their exit survey. They said they learned, *“how to write a resume and interview skills or communication and taking directions well.”* Paperwork is completed by the youth, with exception for parental consent forms. This mimics the application and hiring process that participants will experience when entering the workforce. Several participants referenced gaining experience with the interview process as a new skill gained in their exit surveys.

Goal Two: To increase participant’s knowledge and awareness of community and environmental issues through education and service learning.

- *Objective 2a: By service completion, 70% of corpsmembers show an increased interest in environment and/or community*

Community and environmental issues were discussed at length through structured education activities and in the field. Below is an overview of the kinds of educational activities corpsmembers completed.

Structured education: I carefully analyzed activity reflection worksheets completed by the corpsmembers and reviewed the service learning curriculum to better understand how structured educational activities taught participants about different aspects of urban agriculture. Additionally, some structured activities occurred at the community garden I was a farm partner at, and some farm partners discussed

their role in facilitating structured talked. Crew leaders are expected to schedule 30-60 minutes of education per week of the program, as outlined in the service learning curriculum. Crew leaders are encouraged to draw from activities listed in the service learning curriculum, but are given the freedom to develop their own activities on topics not covered in the curriculum. The LCCC required that crew leaders complete an activity on community and a resume workshop as two of the structured education activities. Additional activities completed during the 2014 program season included a discuss on bees, a tour of the food bank, and an activity on label reading and food miles that I refer to as the food system activity.

The community activity was completed during the first week of the term, during which crew leaders led participants through a series of discussion questions to get them thinking about the various components of a community. The group then worked together to think about what a utopian community might look like and what role agriculture plays in the community. This activity helped participants begin to think about how the urban farms they work on are woven into the fabric of the community as a whole. One crew member remarked in a reflection worksheet on this activity

We learned about how if we help people others will help us, if we farm or grow some crops it can make a big difference on a family.

and another,

Many communities work together to sustain life. Life is sustained by a system of communities, which make central order and work off of each other. So pretty much synergy.

Community means different things to different people and by having an activity devoted to the concept of community helped to ground the service work on the AgriCorps program in a common language and put the work they are doing in context. Several corpsmembers related this activity back to the urban farms they worked with, one stating: *“you have to have a good community to have a good CSA farm,”*

making a connection to the farm partners with Community Supported Agriculture programs, and another commented that, “we feed those less fortunate,” connecting back to the three farm partners that grow food for the food bank.

Additionally, two farm partners discussed in their interviews longer talks that they gave to corpsmembers on the invitation of the crew leaders. Crew leaders did not collect activity reflection worksheets on these talks and my knowledge of them comes exclusively from interviews with the farm partners who gave them. Both farm partners said they enjoyed being able to talk to the participants about why they do what they do and how it relates to bigger picture issues in the food system. One farm partner described how they started out talking about organic production techniques and circled into a broader discussion about why they do the work that they do:

I kind of gave them more motivational, bigger picture type stuff about why we do what we do. To where yeah, it's redundant, it's boring and hard to weed all day, but when I look at the bigger impact that we make as a farm, that that's why we do it. And they seemed to perk up with that. And I think they saw the connection between the bigger impact we can make.

This farm partner operates a production farm that utilizes the AgriCorps crew to help primarily with weeding and some planting. They appreciated having a structured opportunity to talk with the corpsmembers about the bigger picture of farming, and felt a deeper connection with the crew because of it. The second talk focused on farm to table and spanned into topics like food scarcity and food availability. In our interview they described:

I also appreciated that one day that we sat down with them and talked to them about farm to table stuff. That they [crew leaders] were talking to the kids about food scarcity and food desserts and food availability. And what are your options? If you want to eat healthy, and there is this perception that local organic food is really expensive, and if you don't have the finances to manage that, what do you do? And they were talking to kids about how to eat locally, and how there's the food bank and we talked about sprouting up and volunteering

The farm partner felt that this opportunity to talk openly with the corpsmembers about larger issues in the food system was very important for the corpsmembers overall understanding of the work that they

were doing on farms like his and addressed some of the concerns that they might have about how they can go about eating local.

Participants in the second session learned about the steps in the food system during orientation and again during a food label activity. In response to the Food Label activity, several participants commented that they learned a lot about where their food comes from, many of which commenting that it was, 'shocking' how far their food travels and that they will now, *"think about where my food comes from before I eat it."* One especially corpsmembers thoughtfully remarked:

I learned about the community of the world. Sure, we could have a great government and peace world, but our communities have become polluted with our negative impact of the agriculture and food.

This same corpsmember stated that the activity highlighted the importance of CSAs and that they were going to apply what they learned by, *"starting to raise awareness towards agriculture and CSAs."* This one corpsmembers insight about CSA culture were not representative of the group as a whole³, but show that structured education in the AgriCorps has the potential to engage willing participants.

Several corpsmembers in the second session commented in activity reflections that they learned a great deal about where their food comes from the food systems activity. One corpsmember commented specifically about learning, *"that quinoa is hard to get in Bolivia because so much is shipped out."* One participant responded:

I learned about the community of the world. Sure, we could have a great government and world peace, but our communities have become polluted with our negative impact of agriculture and food

Another commented specifically about learning that, *"I don't eat as healthy as I thought,"* and another, *"that the average person eats three burgers a week [and] I should eat fewer burgers."* Some participants

³ Though both terms worked with at least one CSA farm, only 50% could identify what CSA stood for in the exit survey.

felt empowered by the information learned through the activity: one to *“to be more aware of what I’m eating”* and another, *“how I can impact what I eat and where it comes from and how long my food takes to be in the store.”* This activity received very positive reviews from participants. To the question, *“should this activity be repeated?”* one responded, *“Yes, please, this helps to teach kids about our impact on our world. It moved me deeply.”* Another said, *“Yes, because it tells how if we don't stop the world could not keep up with us.”* This activity helped participants make connections between the work they do on the farms and their personal food choices.

The Food System activity was coupled with a tour to the food bank during the first session. There may have been too many themes presented this day and many participants left some confusing remarks on what was learned through this activity. Half of the participants reported learning about how the food bank helps people in need, one stating that, *“hunger is a larger problem that I thought. Communities really come together to work for less hunger.”* Two of the eight corpsmembers remarked that they learned that, *“All of the food we grow goes to the food bank,”* and, *“that the food we plant on farms goes to the food bank.”* Three of the four farms that hosted the AgriCorps in the June session were public gardens that donated a portion of their food to area food banks or volunteers. Though understandable how participants might draw this conclusion, it is concerning never the less given how it paints a distorted picture of urban agriculture projects and stresses the importance of having a balance between public gardens and production farms for each session. The mixed experiences participants seemed to have with these activities underscores the need for better defined learning objectives regarding food system education for AgriCorps crew leaders to draw from.

Two farm partners discussed giving talks and leading a discussion with crew leaders on various issues related to food and farming. The farm partners both commented on how engaged the corpsmembers were and feeling that the talks helped the corpsmembers to understand the relevance of the work

that they do. Crew leaders did not give out formal reflection worksheets after these talks and participant reactions were not captured or analyzed.

Field talks: In addition to structured education, farm partners and crew leaders were also responsible for a great deal of education in the field. I observed these teaching moments in the field during my participant observations in 2014 and through my experience as a crew leader in 2013, and talked at length with farm partners about their approach to teaching in the field during their interviews. One farm partner described their goal of explaining the “*what, why and how,*” for each task as they assigned to the crew, recognizing that:

Everyone needs a different piece of information. So if we're harvesting carrots, here's the task, this is how you do it this way, these are the reasons it's important. These are the goals, we are doing this for CSA, we're doing this for restaurants. I tried not to leave out any information.

Different farms had different approaches to informal education in the field. One public garden has the corpmembers complete a wide variety of tasks every week at the garden. Many of the corpmembers reported that this garden was their favorite farm because of this variety. I asked the farm partner if assigning a diversity of small tasks was an intentional teaching strategy, or if it was just the nature of work in that garden. They responded:

it's very intentional on my part. I want to make the best use of their time and their efforts and to make sure that they are completely engaged in what they are doing so when the program is complete they had a very positive experience verses feeling like they were just weed pulling labor. So as an educator, and having worked with young people for years and years and years, [I recognize that] one size does not fit all for young people as far as what will spark their interest and enthusiasm.

Sparkling interest and enthusiasm was at the central to the purpose of the AgriCorps program according to this farm partner who helped shape the program's initial structure. They felt that if the program could spark an interest in agriculture, then the participants could go on to pursue sustainable agriculture on their own terms, in their own unique way. They suggested that participants could use what they learned

in their home garden, to start a school garden, or to take a stand against poor quality cafeteria food in their school. In order to create that spark, this farm partner was very intentional about providing both diversity of and context for the tasks they assigned. *“Personally, I don’t want to do something just because I’m told to do it. I want to know that it has relevance and it has meaning. So I work very hard to provide context.”* By making sure that tasks had relevance and meaning, this farm partner was also educating about the broader context of urban and sustainable agriculture.

Other farm partners spoke to an interest in painting a complete picture of farming for the participants while they were there in the interview process. One farm partner decided to have the crew do what he considered one of the most dreadful farm tasks, removing drip (irrigation) tape from the field, so that the crew could get a better sense of what needs to happen in order for the crops to get to a harvestable point. Prior to this, the crew had spent a majority of their time at this farm harvesting and preparing food for market. On this last day, the day of my field observation, the crew first removed irrigation tape, then start seed trays, and lastly wash and bundle food for the CSA pick up. They explained the motivation for having the crew complete these tasks on their last day by saying:

A lot of people and kids start to feel like farming is this glamorous thing that just magics itself into creation. The drip tape to me was trying to show that this isn’t just all picking things out of the ground that there’s stuff underneath that that goes into the process that is elemental to it all. If you don’t have drip tape then you don’t have plants, and if you don’t have good loose soil than you don’t have plants. And yeah, I felt like it was more about mixing it up and giving them the whole spectrum.

Farm partners, by intentionally structuring activities that help corpsmembers understand basic tenants of food production, encourage more meaningful learning outcomes for corpsmembers.

Corpsmember picked up on different lessons at different farms as a result of the effort that farm partners put into educating in the field. At one public garden that specializes in native plants, two of the participants commented in their final reflections learning about the importance of native plants, one

stating that they would learned what they used at the farm to, *“plant more native plants”*. Corpsmembers reported learning about how, *“most bugs are bad for the plants,”* and to, *“kill bugs that are on my plants”*, at a public garden that engaged the crew in insect scouting and manually squashing eggs and mature insects. 63% of participants left a comment about these insect scouting activities in their activity reflection about this farm. Many corpsmembers reported learning new things about how to harvest various vegetables, how to transplant, and other regular farm tasks in their project reflection worksheets as well.

Though there is an expectation that farm partners will provide an educative experience for AgriCorps corpsmembers, there are no guidelines that require farm partners complete structured educational activities or parameters for how they should interact with crews in the field. Project log data reveals that at some farms, crews spend entire days working on similar tasks such as transplanting, harvesting, or weeding. This denies corpsmembers the opportunity to experience the complexity of small-scale agriculture and may result in missed opportunities to spark interest and enthusiasm in the environment or community. Additionally, some farms were better than others at engaging with the crew and explaining things in a way that resonated with them.

There are many reasons why farms may have the crew focus on specific tasks, including farm/garden size and production focus. Production farms often struggled to find tasks that were stimulating for the crew, but also helped them meet their bottom line in terms of efficiency and quality. Production farms have a different set of expectation and thus a different set of outcomes for field based learning. Tasks are often repetitive and last longer in duration at production farms in large part because that is what the physical space demands. Though the work is less varied on production farms, there is still much participants can learn. As one manager of a public garden pointed out, lessons learned on farms are more, *“about understanding efficiencies, understanding speed.”* Crops on production farms

are planted in long 100 foot rows which often means that tasks such as planting, weeding and harvesting take considerably more time, leaving less time for special projects. Many public gardens plant smaller quantities in smaller beds and tasks take less time to complete allowing for a greater diversity. Harvests are also very different at public gardens verses private farms. Produce harvested at commercial farm must be 'market ready,' which requires extra attention paid to quality, quantity, and efficiency. Participants harvesting for market or CSA at a production farm could have the opportunity to help not only with harvest but with washing, bunching and storing the produce for a consumer, gaining an understanding of how food gets from farm to table. Corpsmembers also picked up on the different lessons learned at production farms stating that they learned, "lot of the time goes into harvesting," and how potatoes are harvest, and, "*that there is different types of potatoes, there is purple, white and red potatoes.*" Additionally, corpsmembers learned that unlike public garden, "*most food harvested [at this farm] will go to local area restaurants and farmers' markets.*" This was in contrast to a comment left on a reflection worksheet about what they learned at a public garden that donates most of the food they grow to food pantries. This corpsmember said that they learned, "*not everybody can get food so we grow food for the stores to give to the community,*" about service in their community as a result of working with that public garden.

Goal three: To complete meaningful and long lasting conservation projects in Northern Colorado that benefits our environment and community

- *Objective 3.1: By the end of their service term, each corpsmember will complete 80 hours of service on local farms/gardens*

Projects or tasks completed by the AgriCorps were grouped into the following categories in project logs: planting, transplanting, direct seeding, harvesting, mulching, weeding, other projects. This is detailed in

Table 4.2 below. Planting, transplanting, and direct seeding were combined into a single category, “Planting” in Table 4.2 to simply analysis.

Table 4.2: Project Log Data

Task	June Session	July Session
Planting*	13/16	6/16
Harvesting	5/16	15/16
Mulching	6/16	2/16
Weeding	12/16	10/16
Other Projects*	13/16	15/16
Total Pounds Harvested	25.9	93.2

All data in the project log was measured in terms of area rather than time. To better understand which tasks crews were most commonly engaged in, I counted the number of days spent engaged in each activity. Planting was the most frequent activity for the June session (81% of days), where harvesting was for the July session (94% of days). Both crews weeded on over half of the days (75% of days in June and 62% in July). The June session spent more time mulching than the July session and had fewer experiences with harvesting. If we look at total poundage harvested, the June crew harvested a quarter of the total weight of produce compared to the July crew. Though there are some differences in produce being harvested in June in July (light leafy greens and lettuces in June, heavy roots and squash in July) the time and amount harvested by each crew varied greatly.

Both sessions engaged in what was categorized as other projects. These other projects were difficult to quantify and unique to farm that assigned it. Examples of other projects include: bed prep; building a fence; moving/organizing; staking/trellising; food prep; brush/limb clearing; paving a patio area; repairing and painting a chicken coop; turning compost; and building a xeriscape demonstration garden.

Question 5: Does AgriCorps Achieve Their Stated Goals and Objectives?

In the following section, I will document whether each goal and corresponding objectives were met using program documents such as entrance and exit surveys; corpsmember evaluations; reflection worksheets; goal setting activities; project logs; and farm partner interviews.

Goal One: To promote self-sufficiency in youth and young adults through skill development for personal and professional growth.

Objective 1a: Post service, 80% of corpsmembers leave prepared to speak about their service and have a tangible record (resume) of their term

The resume workshop facilitated by the Larimer County Workforce Center's Youth Team prepared participants to speak about and have a tangible record of their service. All but one participant (94%) completed this workshop exceeding the 80% threshold set by the LCCC at the beginning of the season. Participant reflections on the resume workshop were overwhelmingly positive. *"It was very helpful and I feel like I have a resume I am confident with now,"* one responded. Others felt that the workshop was very time consuming, but worth it because you leave knowing how to write a resume. Participants said they learned, *"what skills and what jobs look for in resumes," "what we learn on the farms."* For some, this resume workshop was an insight into the competitiveness of the job market. *"I learned that getting a job is harder than it sounds,"* said one participant. Two others discussed how challenging the workshop was, one of who said that it was confusing. Others left the workshop feeling more prepared to apply to future jobs. *"It will help us when we get older and when we apply for a job,"* said one participant, *"I will be able to apply for better jobs with a well written resume,"* said another. This activity served as an opportunity to reflect on the skills developed through the AgriCorps and gave them an opportunity to translate these skills into words.

There were five questions related to workforce development on the survey, one of which that related directly to writing a resume. Overall, only 21% of participants increased their support for statements regarding workforce readiness assessed through question 7 (table 4.3). 31% of participants reported feeling more confident in their ability to complete a job interview and application, something many had gained experience with for the first time through the hiring process at the LCCC. Interestingly, 38% of participants left the program feeling less optimistic about future employment. Change in response to individual questions can be found in figure 4.3.

Table 4.3: Change in Support for Survey Question 7 on Workforce Readiness

Question Number	Question	Percent Increase Support	Percent No Change	Percent Decrease Support
7.1	I feel confident in my ability to write a resume	19%	63%	19%
7.2	I am able to complete a job interview in a professional manner	31%	44%	25%
7.3	I know how to properly fill out a job application	19%	56%	25%
7.4	I feel confident in my ability to search for job opportunities	38%	50%	13%
7.5	I feel confident about my ability to obtain a job in the future	0%	63%	38%
Average Change Across Category		21%	55%	24%

Objective 1b: By the end of their term, 75% of corpsmembers show growth in transferable personal and professional skills.

Growth in personal and professional skills were most directly assessed through corpsmembers self and staff evaluations and analysis of personal reflections. Corpsmember self-evaluations were completed three points during the season in the following five categories⁴: leadership; personal growth; professionalism; safety protocol; and teamwork and communication. Each question was ranked as exceeds expectations, meets expectations, requires improvement, or unacceptable. No corpsmember was marked as

⁴ These categories come directly from the evaluation, and were unchanged for the purposes of this research.

unacceptable by crew leaders in any category. Mid-season and final crew leader evaluation responses were only available for eight of the 16 participants because crew leaders did not complete the mid-season evaluation on the correct form for the second session of the program. Analysis of individual change for these eight cases reveals that 87.5% of these participants saw an overall growth in soft skills assessed through this evaluation, meeting the objective set by the organization. Average change from mid-season to final season staff evaluations was used as a metric for growth in the categories assessed on the evaluations. Tables 4.4 and 4.5 detail average performance in each of these five categories. Figures 4.2, 4.3, 4.4, 4.5 and 4.6, illustrate the change from mid-season to final for individual questions on the staff evaluations.

Table 4.4: Percent Growth by Evaluation Category on Crew Leader Evaluations for June Session

Category	Number of Questions	Individual Growth
Leadership	4	50%
Personal Growth	5	88%
Professionalism	4	100%
Safety Practices	5	100%
Teamwork and Work Ethic	10	100%

n-8

Table 4.5: Average Corpsmember Performance by Category on Mid-Season Crew Leader Evaluation

Category	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Leadership	6%	66%	28%	0%
Personal Growth	8%	78%	15%	0%
Professionalism	3%	94%	3%	0%
Safety Practices	0%	93%	8%	0%
Teamwork and Work Ethic	4%	86%	10%	0%

n-8. Mid-Season Staff Evaluation data was only available for the first session of the AgriCorps.

Table 4.6: Average Corpsmember Performance by Category on Final Crew Leader Evaluation

Category	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Leadership	33%	64%	3%	0%
Personal Growth	45%	53%	3%	0%
Professionalism	72%	23%	5%	0%
Safety Practices	96%	3%	1%	0%
Teamwork and Work Ethic	46%	51%	3%	0%

n-16

In addition to the scaled response questions, corpsmembers also completed a goal setting exercise along with their self-evaluation, and crew leaders left detailed comments about corpsmember progress along with their staff evaluation. The goal setting activities, entrance and exit reflections, and activity reflection worksheets coded for themes related to professional development, personal development, soft skills, knowledge, and program recommendations. Common soft skills cited by corpsmembers in activity reflection worksheets, goal setting activities, and entrance and exit reflections included: problem solving; time management; respect; teamwork; responsibility; communication; following directions; leadership; and work ethic. Below, I will detail corpsmember performance in the following categories: leadership; personal development; teamwork and work ethic; and adherence to safety protocol.

Leadership: Crew leader evaluated corpsmembers leadership skill development in four areas including one question on assuming leadership roles, one about communication, one about initiative, and one concerning leading by example. Change in responses to individual questions are presented in figure 4.2. Only 50% of individual corpsmembers in the June session showed growth in the all four questions in the leadership category. There was an average increase of 25% for all corpsmembers meeting or exceeding expectations from mid-season to final evaluations in the leadership category. Question 1, “Able to ap-

appropriately assume leadership roles,” saw a 38% increase in corpsmembers who were meeting or exceeding expectations. No participants exceeded expectations for question 1 in the mid-season and 38% required improvement. During the final evaluation, 25% of participants exceeding, and none still required improvement in this category. Question 3, “Takes initiative in problem solving and work tasks,” and question 4, “Leads by example,” both saw a 25% increase in the number of corpsmembers meeting or exceeding expectations from mid-season to final season, with 44% exceeding expectations in these categories in the final evaluation. There was a smaller 13% increase in percentage of corpsmembers meeting or exceeding expectations for question 2, “Communicates opinions when necessary, appropriately and respectfully.” Corpsmembers were also encouraged in the crew leaders’ comments to take more leadership roles. Such comments include: “*step into more of a leadership role,*” and “*develop leadership skills.*” Strong leaders were praised by their crew leaders in their final evaluations, many of who were ‘highly recommended’ for future employment with the LCCC through another session of the AgriCorps, or through their Land Crew.

31% of all participants listed a goal related to leadership skills in the mid-term self-evaluation goal setting exercise. In the initial goal setting exercise completed at orientation, one corpsmember said they wanted to “*grow as a leader and strengthen my leadership ability,*” and another that they want to, “*become a better leader and to lead my group to success.*” On the mid-season self-evaluations one participant stated that they wanted to, “*step up a little more as a leader,*” echoing the language used by crew leaders in their comments on the evaluation. In final evaluations corpsmembers commented on their success in meeting this goal. One said their greatest success in the program was, “*being a team leader and helping my teammates out with their problems,*” and another that they had been a, “*team leader and led my group to success.*”

Personal Development: I combined the questions in the personal growth and professionalism categories on the corpsmember evaluations into a larger personal development category for ease of discussion.

88% of individual corpsmembers in the June session saw growth in the personal growth category, and 100% in the professionalism category. During the mid-season evaluation, 97% of participants were meeting or exceeding expectations for professionalism, and 85% for personal growth with less than 10% exceeding expectations in either category. By the final evaluation, 100% of participants were meeting or exceeding expectations for professionalism, 96% of which were exceeding expectations, and 97% were meeting or exceeding expectations for personal growth, with 43% exceeding expectations.

Goal setting was evaluated in the personal growth category in questions 5, “Can set and achieve realistic personal goals (can set and achieve goals to challenge self in personal and professional development).” Though 100% of participants met this expectation, only 19% exceeded it. Crew leaders left final comments regarding improving goal setting abilities on 25% of the final corpsmember evaluations. All 16 corpsmembers exceeded expectations in the final evaluation on some questions, such as question 10, “wears uniform appropriately,” and question 11, “Follows all general safety guidelines: participates in safety meetings and trainings, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay).” Corpsmembers themselves were less reflective about growth in these category and few made comments concerning goal setting, responsibility, uniform wearing, or self-evaluation in goal setting activities and reflection worksheets.

Question 12, “communicates respectfully and with appropriate language in all settings,” question 2, “Communicates opinions when necessary, appropriately and respectfully,” both address corpsmembers communication skills. At mid-term 75% of corpsmembers were meeting expectations for question 2, and 100% for question 12. During the final evaluation, 87% were meeting expectations for question 2, 19% of which were exceeding expectations, and 96% for question 12, 44% exceeding expectations. Corpsmembers themselves frequently commented on how their participation in the AgriCorps

program improved their communication skills and ability to work with others. 56% of participants commented on the development of communication skills in project reflections. One commented in an activity reflection that he learned new things about, *“working hard and communicating with others to get things done quicker.”* Another talked about how communication skills can be used in daily life, *“when helping around the house; speaking out.”* Participants commented in entrance and exit surveys that they wanted to learn more about communicating with others and dealing with conflict. One participant responded to the question, “What do you hope to learn about working with others:

How I handle. Dealing with ignorance, dealing with frustration. Learning how to work with all others.

The AgriCorps program is structured as an opportunity for youth to work with corpsmembers from diverse backgrounds, teaching them vital skills in how to communicate effectively and how to deal with conflict. In one exit reflection a participant responded commented, *“communication=success,”* in reference to what they learned about working with others.

Teamwork and Work Ethic: All individual participants in the first session saw growth in at least one of the 10 questions asked in this category on the evaluation. The final evaluation 97% of participants were meeting or exceeding expectations, up from 88% at mid-term. An average of 46% of participants were exceeding expectations on these ten categories by the end of the term. Question 19, “Completes all assigned tasks in a timely manner, uses good time management skills,” and question 21, “Independently begins and carries out tasks,” both saw a 25% increase in the average number of corpsmembers meeting expectations in this category. By the end of the program, 100% of participants were meeting, and 63% exceeding expectations for contributing to team efforts (question 20). Additionally, 94% of participants were meeting expectations (75% exceeding) for question 28, “accepting of supervisor direction and instruction.”

Participants recognized the role of teamwork in reflection worksheets and goal setting reflections, in large part because they were specifically asked how they would use what they learned when working with others. One *“I hope to learn more about combining ideas to form one long plan,”* and another, *“I would like to see how we work as a unit.”* For many this was unique opportunity to work with people from diverse backgrounds including crew leaders and project sponsors who are older than they are. Though a common theme in the entrance surveys, only 25% referenced teamwork in the exit reflection activity. Those that did comment talked about efficiency, *“that we worked good together when weeding,”* and collaboration, *“I learned how to collaborate and how to make sure everyone is included.”* When asked what they learned about working with others through a particular project, one participant commented that, *“the jobs went faster with people working hard,”* and another, *“that it is faster and the projects could get done faster”* when working with others. Some commented on how teamwork helped with problem solving with answers to the question what did you learn about working with others with, *“if you have two people it’s easiest to solve problems,”* and *“being a team player and helping others with their questions and problems.”* Participants recognized the value in working as a team and its potential to facilitate efficiency. One participant commented on struggling with the teamwork component of the AgriCorps program by saying, *“you need to work with others, but have to deal with it.”* Though many participants are actively engaged in sports, working learning to collaborate and communicate with crew members, leaders and farm partners to complete a specific tasks helps participant be more prepared for the workforce.

Adherence to Safety Protocol: There were five questions about adherence to safety protocol in the evaluation. All participants met expectations for adhering to safety protocol in the final evaluation, 96% exceeded expectations, up from 93% meeting expectations and none exceeding expectations at the mid-season evaluation. All 16 participants exceeded expectations on question 14, “Demonstrates LCCC vehicle safety: wears seatbelt, follows traffic laws and adheres to LCCC vehicle policies and procedures at all

times. Reports any abuse of policy to supervisor immediately,” question 15, “Maintains company property including, vehicle and building interiors. Disposes of trash and recycling in designates areas. Supports the overall LCCC community in “house” cleaning tasks as needed,” question 17, “Follows guidelines for proper tool use and maintenance a) follows check-in/check-out procedures, b) ensures tools are tracked at all time in possession, and c) does not lose any tools,” and question 18, “Follows all general safety guidelines: participates in safety meetings and trainings, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay).” Overall, this category saw the greatest growth from meeting to exceeding expectations from mid-season to final evaluations, with 96% of participants exceeding expectations across all categories. Figure 4.6 shows detailed response for individual questions in this category.

Goal Two: To increase participant’s knowledge and awareness of community and environmental issues through education and service learning.

- *Objective 1a: By service completion, 70% of corpsmembers show an increased interest in environment and/or community*

Three sets of five-point likert scale questions were included in corpsmembers entrance and exit surveys in attempts to assess change in interest in community and environment. Four questions about community engagement, volunteer participation, and attitudes about youth participation in the community were assessed in the survey. There were 15 statements about attitudes towards the environment in question 15, three of which were specific to agriculture. Questions to assess general attitudes regarding environmental issues included statements such as: question 15.1, “Protecting the environment is important to me;” and question 15.3, “I often talk to friends and family about environmental issues.” Agriculture specific questions included questions 15.13, “Agriculture is an important part of my community,” 15.14, “Social inequality impacts access to food,” and 15.15, “The global food system relies on fossil

fuels.” A full list of questions can be found in Appendix D and figure 4.11 shows change in response to individual questions. Lastly, question 13 had ten statements regarding frequency of engagement with environmental conscious and healthy behaviors such as turning off lights, drinking soda, and shopping at the farmers’ market. Response to these survey questions indicates that participation in the AgriCorps program did not increase interest in environment and/or community. In fact, in many cases there was a higher percent decrease in support for the statements presented in the questions, and a large proportion of participants who showed no change.

Question 12 included four statements assessed on a likert scale about the role of young people in the community. For example, question 12.1 asked participants to rank their support with the statement, “I take an interest in what’s happening in my community,” and question 12.4, “Young people can influence community decisions.” Question 12.1, “I take an interest in what’s happening in my community,” saw a 6% increase in the percentage in agreeance with the statement. There was a decline in the number of participants who strongly agreed with this statement, however from entrance to exit survey. A similar trend was observed in question 12.3, “Volunteer work is very important to me,” more participants agreed with the statement at the end of the program, but fewer strongly agreed. 88% of program participants agreed or strongly agreed to question 12.4, “Young people can influence community decisions,” for both the entrance and exit survey, again with fewer strongly agreeing at the exit than entrance, and 12% participants disagreeing with the statement at the exit survey, compared to none in the entrance survey. Average reported hours spent involved in volunteer and extracurricular activities increased from the entrance to exit survey. In the exit survey, 63% participants reported engaging in some volunteer activities, up from 50% in the entrance survey. One participant reported that they were volunteering at a community garden they had been introduced to through participation in the program.

Table 4.7: Change in Support for Survey Question 12 on Community

Question Number	Question	Percent Increased Support	Percent No Change	Percent Decreased Support
12.1	I take an interest in what’s happening in my community	38%	50%	13%
12.2	Young people have a lot to contribute to their community	25%	56%	19%
12.3	Volunteer work is very important to me	19%	69%	13%
12.4	Young people can influence community decisions	31%	44%	25%
Average Change Across Category		28%	55%	17%

Question 15 assessed support on 15 questions about attitudes towards different environmental issues. Only 14% of participants showed increased support the 15 likert scale questions designed to assess attitudes towards the environment. In fact, 41% of participants decreased their support for these statements, and 35% maintained the same level of support for the statements presented in this question. Only 25% participants showed increased support for the three statements (questions 15.13, 15.14, and 15.15) directly related to agriculture; 33% showed a decrease in support for these statements, and 42% showed no change. Figures 4.9 and 4.10 present change from entrance to exit survey for individual questions.

Ten statements in question 13 assess frequency of engagement in environmentally conscious and healthy behaviors. 25% of corpsmembers showed some positive change in frequency of engagement with the behaviors assessed in question 13 (Table 4.7). 94% of corpsmembers reported in the exit survey always or often eating three or more servings of fresh fruits and vegetables per week, up from 81% in the entrance survey. Similarly, 88% said that they only sometimes or never ate fast food more than once per week (question 13.9) or “drank a soda every day,” (question 13.7), up from 69% in the entrance survey, and drank soda every day in the exit survey, while only 81% did in the entrance. Fewer

reported composting food waste and shopping at the farmers’ market in the exit survey than the entrance surveys. Qualitative responses to questions about farmers’ markets and CSAs in the exit survey also revealed that few participants visited farmers’ markets or which farm partners they worked with sold their products there.

Open-ended survey questions showed some evidence that participation in the AgriCorps program may increase knowledge and awareness of community or environmental issues. Though less than 70%, some participants gained an interest in gardening and agriculture because of the program. When asked how they would use what they learned in the AgriCorps program in the day-to-day life, 43% of the 16 participants responded that they would use what they learned to help in a home or community garden. Two participants, 13%, said that the program had sparked an interest in a career in agriculture. Many corpsmembers gained an appreciation for the kind of conversation work done by the LCCC and applied for a second term in 2015; 20% participants in 2014, applied for a position with the Larimer County Conservation Corps in 2015.

Table 4.8: Change in Support on Survey Questions 15 on Environmental Attitudes

Question Number	Question	Percent Increased Support	Percent No Change	Percent Decreased Support
15.1	Protecting the environment is important to me	6%	44%	50%
15.2	I am aware of a variety of ways to take action to protect the environment	0%	50%	50%
15.3	I often talk to friends and family about environmental issues	25%	25%	50%
15.4	The management of public lands is an important issue	25%	31%	44%
15.5	Public lands should be preserved to protect wildlife habitat	0%	50%	50%

15.6	Public lands for recreation should be separate from public lands used for wildlife preserves	0%	56%	44%
15.7	Public space is important to my quality of life	19%	56%	25%
15.8	I use the 7 principals of Leave No Trace when hiking or camping	13%	56%	31%
15.9	Wildfires can be beneficial to ecosystems	6%	56%	38%
15.1	All forest fires should be actively and immediately suppressed	6%	44%	50%
15.11	I am educated about the history of water rights in Colorado	19%	44%	38%
15.12	I am aware of my communities efforts to conserve water	19%	38%	44%
15.13	<i>Agriculture is an important part of my community</i>	25%	38%	38%
15.14	<i>Social inequality impacts access to food</i>	19%	50%	31%
15.15	<i>The global food system relies on fossil fuels</i>	31%	38%	31%
Average Change Across Category		14%	45%	41%

Table 4.9: Change in Support for Survey Question 13 on Healthy Behaviors

Question Number	Question	Percent Increased	Percent No Change	Percent Decrease
13.1	Compost food waste	19%	50%	31%
13.2	Shop at the farmers market	13%	63%	25%
13.3	Unplug electronics I'm not using	38%	38%	25%
13.4	Exercise for at least 30 minutes 3 days per week	6%	69%	25%
13.5	Drink at least 64 oz. of water per day	0%	75%	25%
13.6	Turn off lights when I leave the room	6%	69%	25%
13.7	Drink soda every day	6%	69%	25%
13.8	Eat at least 3 servings of vegetables per week	31%	50%	19%
13.9	Eat fast food more than once a week	13%	50%	38%
13.11	Shower for more than 15 minutes	19%	56%	25%

Average Change Across Category	15%	59%	26%
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Participants were also asked to list, draw or diagram the steps in the food system in both the entrance and exit survey. Many participants drew simple sketches in the entrance survey, several drawing the dietary food pyramid rather than a food chain. Participants on average drew more thorough diagrams of the steps in the food system in the exit survey than in the entrance. The second term in particular left being able to identify how food gets from farm to table (find examples of participant diagrams in figure 4.12) and could distinguish between community gardens and CSA style agriculture. This is likely because they second term received more direct education on these topics and worked on two productive farms than just one.

Goal Three: To complete meaningful and long lasting conservation projects in Northern Colorado that benefits our environment and community

- *By the end of their service term, each corpsmember will complete 80 hours of service on local farms/gardens*

All 16 corpsmembers completed the required 80 hours of service during the AgriCorps program. Participants who missed a workday were required to make up hours by volunteering at an approved location, often a host farm that offers set volunteer hours. Cumulatively the AgriCorps program participants and crew leaders contributed 1,440 hours⁵ of service at area urban farms and gardens during the eight week program season, contributing to the potential success of these urban agriculture projects.

Supporting urban agriculture projects can be seen as contributing to meaningful and long lasting conservation projects because these spaces are preserving food production spaces in urban areas. All but one host farm was located adjacent to residential and business centers. Three of the host farms

⁵ This number excludes commute, break and activity time, which would reduce the number of total hours worked significantly. Two farm partners complained about the amount of productive time that crew leaders took at their farm for evaluations and activities.

were public gardens, one of which is a botanical garden operated by the City of Fort Collins that sees upwards of 100,000 visitors per year (Gardens on Spring Creek 2016). Another community garden was a part of a larger natural area that was supported by an eco-friendly housing development. Two of the three farms were located in densely populated neighborhoods. As of 2016, four of the six host farms in 2014 were still in operation; the two farm partners who were renting land are exploring other options; one taking a sabbatical year and looking for a permanent land solution, and the other has taken over management of a different farm who also partners with the LCCC. Overall, the host farms that partner with the LCCC have a long-lasting impact on the landscape of urban agriculture in northern Colorado.

Farm partners receive 200 free labor hours per four-week session of the AgriCorps program. Corpsmembers complete a variety of small tasks and special projects on farms depending on the needs of the farm partner. Some community gardens use the help of AgriCorps crews to accomplish larger projects that would be difficult to complete with limited staff or volunteers. Two of the community gardens scheduled larger building projects for when the AgriCorps was present adding valuable infrastructure to these site that will last beyond the season. Aside from larger projects, common tasks performed by the AgriCorps crew, such as weeding, planting and harvesting, are often tedious, repetitive and must be repeated throughout the season. Labor-intensive tasks such as these are a necessary component of sustainable agriculture practices. The human power the AgriCorps provides for the host farms allow them to avoid the chemical herbicides, fertilizers, and pesticides often used by their conventional farming counterparts, contributing to the overall sustainability of these farms, and therefore to a broader scaled soil conservation and water quality efforts.

Though a good source of labor, hosting requires a lot of time and energy to coordinate. Farm partners must spend time outside of hosting the crew scheduling activities, even reserving certain tasks for the crew, so that the crew can have a unique and educative experience. The crew is very efficient at some tasks, and overall very helpful to farm partners, farm partners can still struggle with how to most

effectively utilize the crew. One farm partner expressed an internal conflict with balancing the goals as production farmers trying to make a living with their interest in supporting educational programs such as the AgriCorps, because:

Even though it's many hands, it's slightly unskilled. [...]. Maybe we don't give them enough credit, but for us for our harvest days [are complicated], even with our working members, [...] because its uneven bunch sizes and we're trying to be consistent as a production farm.

Production farmers have different needs for the AgriCorps than the public gardens. All of the production farmers commented on being initially interested in hosting the AgriCorps because it was a source of 'free labor.' One farm partner commented:

That's kind of how it got introduced to me. That 'it's great you have these kids come out once a week and they weed and they go away and they have chaperones so you don't even have to worry about it.'

A crew of ten power weeders is very compelling for many farmers, but is not necessarily what motivates their involvement in the program. Many commented that the labor was less important than providing an educational experience for the crews to learn about employment and food production. The same farm partner who commented above also said that, *"Initially I entered for something to get out of it, and then I realized how much I wanted to give to [the program]."* Another production farmer discussed how, *"we just want it to be worthwhile for them, because if it's not worthwhile to them then it's not worthwhile to us. [...] It's just like having zombies on the farm."* Farm partners emphasized how much of their time they had to invest in hosting the AgriCorps, and stressed that if they did not have a commitment to education, that it would likely not be worth it to host the crew. Some farm partners even commented on feeling that their level of productivity decreased when the AgriCorps crew was there because of the time they had to spend managing the crew took away from doing other tasks. That being said, all praised the AgriCorps participants for their efficiency and productivity during their time at the farm.

Question 6: How does service learning support the achievement of the goals and objectives of the AgriCorps program?

Part of my interest in this research was to better understand how service learning was understood in context of this program. I learned about how service learning was incorporated into the program through observations and analysis of documents such as the website, brochures, environmental learning guides, crew leader handbooks, and corpsmember handbooks. The LCCC included the term service learning in their definition of the AgriCorps program in 2014 program materials. According to the program website the AgriCorps program is:

Volunteer based program [that] introduces youth to sustainable agriculture through local food projects that support low-income families in Larimer County. Through these service learning projects, participants are exposed to work skills and learn how to be involved within their community (LCCC 2014)

My work as a graduate intern helped me in building a better understanding of how service learning was understood by the LCCC as an organization, how this influences program activities, and how to communicate this to crew leaders who utilize the service learning curriculum I helped develop. Though service learning was included in the definition of the AgriCorps program, the organization did not have a formal definition of service learning prior to my internship with them in 2014. I facilitated a meeting with LCCC staff through my internship, where we reviewed definitions of service learning from the literature and drafted a definition of service learning that best fit the goals and objectives of the organization.

The following definition for service learning was created as a result:

A philosophy of reciprocal learning that provides a structure for active reflection with the goal of empowering members to connect to a larger social and environmental context.

The LCCC staff established reciprocal learning and active reflection as the key elements of service learning for their programs.

The notion of reciprocal learning between program participant and project sponsors was an important element in a definition of service learning by Stanton, Giles, and Cruz (1999: 5) “reciprocal learning—which determines the purpose, nature and process of social and educational exchange between learners and the people they serve, and between experiential education programs and the community organization with which they work.” All programs at the LCCC work closely with community partners to develop projects that are both beneficial for the community and for the youth who is completing the tasks. Additionally, the LCCC staff felt it was important to emphasize connecting the work they do to larger social and environmental context. The emphasis on active reflection was derived from a 1994 definition developed by The National Society for Experiential Education which defines service learning more broadly as, “any carefully monitored service experience in which a student has intentional learning goals and reflects actively on what he or she is learning throughout the experience” (Furco 1996: 1). The LCCC has incorporated active reflection into their program activities in a variety of ways over the years including group discussions and independent journaling. Independent journaling exercises had become less frequent in the years leading up to the 2014 program season according to the LCCC Corps Manager. The staff present at the service learning meeting noted that they wanted to incorporate more opportunities for individual reflection and journaling moving forward, but that they needed to maintain a balance between time spent on education and reflection and time spent engaged on projects. The Corps Manager described this as a pendulum that can swing too far in one direction or the other and wanted to be cautious in how they approached reintegrating individual reflection into the program to respect their project commitments. In light of this goal, I worked with LCCC staff to develop a series of individual reflection worksheets that crew members would fill out at various points during the season. This provided structured opportunities for individual reflection as well as valuable feedback about program components to use in evaluation.

Below is an outline how both reciprocal learning and active reflection were drawn upon in the AgriCorps program to help facilitate the achievement of the program goals and objectives:

Reciprocal Learning: Farm partners were both committed to education and adaptable to changing moods, motivations, and interests of teenage corpsmembers. It was important to the LCCC that host farms have a demonstrated commitment to education and a general understanding of hosting volunteers in order to be selected as a host farm for the AgriCorps program. The LCCC expected farm partners to assign tasks for the crew that were engaging, educational, and appropriate for the skill level of the corpsmembers. Farm partner interest in, and experience with, hosting youth volunteers was assessed by the LCCC staff through a request for proposal process implemented in 2014. This process helps to screen out farm partners who looking for free labor and not committed to providing quality in-field education. Three of the four farm partners were public gardens with explicit educational missions and regular volunteer programs, and the three commercial farms all hosted volunteers or working members and were familiar with managing labor. One commercial farmer, an owner of a small CSA explained that:

Our tag line is educate, inspire, and excite. [...] That's what our business means to us. Yes, it's about making money, and yes it's about providing food for the community, and all those things. But through that process we really want to educate people first

This demonstrates the commitment to education that many farm partners had that influenced their approach to education in the field.

Several farm partners alluded to how hosting the AgriCorps required that they regularly reflect on their own teaching, asking themselves how they could improve the experience for the corpsmembers, turning the host experience into a learning opportunity. Two of the farm partners discussed how they engaged corpsmembers early in the program season to better understand their interests and motivations and catered their field talks accordingly. One farm partner explained that they had been incorporating both active reflection, and self-evaluation into the daily debrief by requesting that participants

name one unique thing that they learned that day. They said, “it’s fascinating to me as well to evaluate my effectiveness if they actually have something to say, or if all 8 of them say the same thing, then it doesn’t reflect well on me.” Other farm partners are very conscious to make the information relatable to the corpsmembers. They described:

I’m on the mentality that no kid should be treated like a kid, just a mini adult. They haven’t developed enough to be comprehending it all yet, but they still deserve to be treated that way and talked to that way, you know? I try to dumb it down and relate it to things they can understand. They all giggle when you talk about plant sex but that’s what we do, and that’s what we deal with, sexual reproduction of plants, but they get it and that’s what matters.

Tailoring information to be age appropriate and engaging is an important way that farm partners adapt to corpsmembers. Adapting and learning how to motivate teens was one of the more overt ways that farm partners learned from the corpsmembers.

Hosting a large volunteer group for four consecutive weeks was a way for some farm partners to develop their volunteer management skills. One farm partner commented on how most groups volunteered at their garden for discrete events and workdays, and that planning for the AgriCorps required a great deal more time. They said it was, “so worth it though, because they got so much done.” This garden arranged for some larger projects to be completed with the AgriCorps crew that they said would have taken significantly longer with the small paid staff they had. This was similar to what I experienced hosting the AgriCorps at the community garden I managed. I often created a tasks list that was twice as long as I expected could be done in a day because crews often moved faster than adult volunteers through projects. I also utilized the AgriCorps crews to start larger projects, such as laying stone for a prep kitchen patio, that was too time consuming to assign during regular volunteer hours. The organizational skills developed through hosting the AgriCorps improved my role as volunteer coordinator at the community garden.

Corpsmembers are given ample opportunities to learn about farming and garden from farm partners who give micro-lessons in the field throughout the day. The farm partners I observed in the field were intentional to provide some background information for the tasks that they assign, and many are very conscious to take time to point out interesting things happening in the garden or on the farm. In an interview, one farm partner described how they set up an insect scouting activity at their garden:

I've used the example, like you've probably heard me say before, the Mexican bean beetles in the bean patch and doing insect scouting and looking for the eggs, the larval, and the mature adults. When we see the larva, we look at larva from lady bugs, and they look the same, but lady bugs are beneficial and we don't want to kill beneficial eggs. So I had them think about well what do you think they are? Is this whole bed is infested with lady bugs, or is this whole bed is infested with bean beetles? So, is it likely that these are lady bug eggs? No. Is it possible? Yes. I try to walk them through the whole thought process behind that.

Farm partners work hard to explain things that they find fascinating that are happening on the farm or garden in hopes of inspiring an interest in farming or gardening in participants. Corpsmembers pick up on this enthusiasm and retain the lessons learned. 63% of participants mentioned something related to killing bugs, insect scouting, or potato beetles in their reflections about this particular public garden. One said that they learned how to, “*help keep crops safe from bugs that kill plants,*” and another, “*that potato beetles kill cabbages because it is food to them*”. Corpsmembers retain what they are learning during these field talks, providing an educational experience, in addition to professional development.

Active Reflection: Corpsmembers were given ample opportunities for both individual and group reflection throughout the program. Reflection worksheets completed as part of this research were a tool for individual reflection, replacing journaling prompts commonly used by conservation corps⁶. These reflec-

⁶ See: Martin (2013) and Miller (1998)

tion worksheets allowed corpsmembers to actively reflect on individual farms, activities and the program as a whole. Goal setting activities that accompanied the self-evaluation was another occasion for self-reflection.

I observed on several occasions crew leaders leading an end of day debrief during which crew members reflect as a group upon their day through a series of questions, or commonly through listing of highs and lows. Included in the service learning curriculum was a list of discussion prompts and tips for facilitating the debrief circle that crew leaders were to use to engage corpsmembers. The degree to which the groups discuss learning outcomes varied during my observations based on a number of factors including time, weather conditions, and energy level of the crew. Crew leaders would allot anywhere from 5-20 minutes to the daily debrief depending on the projects being completed that day. If the crew was actively engaged in a larger project that was near completion, the crew leaders would spend less time of the daily debrief to complete the project. Corpsmembers showed varying levels of engagement with the daily debrief and group reflection activities during my observations. Some were very vocal in helping complete the project log and reflecting on the highs and lows of their day, while others participated only when probed.

All LCCC crews were given a camera to document their time in the field. Individual corpsmembers were assigned the role of photo taker for a portion of the program season. I encouraged crew leaders during the service learning section of their orientation that I facilitated to use photos taken by corpsmembers as a reflection tool at the end of the season. I worked with the development associate and crew leaders during the first session of the program to complete a photovoice activity. The crew leaders went through a series of 8 photos, two from each farm, that I had selected to highlight the different kinds of tasks that the corpsmembers had been completing thus far that season. The corpsmembers worked as a group to complete a photo voice worksheet with the crew leaders with prompts about what

they learn, how they felt, and how they can apply what they learned in the future. This activity was completed in the last week at the community garden I managed and I was able to help facilitate it with the crew leaders. Corpsmembers seemed to appreciate the opportunity to reflect upon what they had accomplished during the season, many commenting on how they had forgotten about doing certain tasks. Crew leaders probed the corpsmembers to think about how different tasks related to one another and what the larger purpose of completing activities like weeding might have been. Additionally, corpsmembers were given the opportunity to discuss and reflect upon their program experience during the resume-writing workshop. Though I was not present at this workshop, the crew leaders reported that the workshop facilitator guided the corpsmembers in a reflection activity prior to writing resumes that helped the corpsmembers summarize their AgriCorps experience in terms of skills.

Several farm partners were eager for more opportunities to engage the crew in active reflection about the work they were doing at their farm or garden. One farm partner took a very active role in the end of day debrief as a means to get feedback from crew members on what they were learning at their farm. Individual crew members were asked to name on new thing that they have learned that day; this thing had to be unique from the responses given before them encouraging participants to think more broadly about lessons learned that day. This farm partner appreciates this time because, she thinks, *“it brings it home for them because they have to articulate a concrete change.”* This to me seems to be a more effective way to give participants an opportunity to summarize what was learned that day than just listing off accomplishments while crew leaders fill out a project log. Another farm partner called for more opportunities to engage with participants about larger issues in the food system during breaks or over an extended lunch.

If they could be there for 6 hours with an hour-long lunch where we could all sit down and communicate and let them be kids but also engage them on that level. When they're in their comfort zone they could reach out and engage more.

Having more opportunities to connect and engage is important for many farm partners and would provide another opportunity for active reflection.

Question 7: What is unique about AgriCorps—Why Farms?

The following section draws upon a variety of data sources, farm partner interviews and conversations with LCCC staff, observations of crews in the field, and analysis of program documents such as corpsmember handbook, the service learning curriculum, newsletters, grant applications, and internal program documents, to better understand what makes the unique. The motivation for the Larimer County Conservation Corps (LCCC) to work on urban farms was part structural and part personal. In terms of program structure, working at urban farms accommodates shorter workdays, less skilled labor and increased supervision in for younger corpsmembers. Traditional trail based conservation corps crews often work in public wilderness areas that are located anywhere from 30-90 minutes away from the town the conservation corps is based in. The trail crews operated by the LCCC either spend a portion of their day commuting to the wilderness area, or camp on site to minimize travel time. Often, crews hike in and carry tools into their worksites, taking additional time out of the 8-10-hour workday. The AgriCorps program is able to offer what the corps manager referred to as a “*condensed conservation corps experience*,” for younger youth in large part because the commute and preparation time is minimized through working with urban farms. Farm work in some ways requires less technical skill than trail building and accommodates increased supervision of less mature corpsmembers by crew leaders and farm partners. Trail based crews are often spread out and given more opportunities to work in small groups without direct supervision of a project sponsor. The LCCC first partnered with an urban farm before the development of the AgriCorps program. One farm partner described how:

The first year I was hired, which was 2009, [...] was the year that the Garden of Eaten was built, the LYCC⁷ was here and they did 160,000 yards of mulch. And they had a contract with the Parks Department on another project and they finished early and they came here to do the mulch. And that how I was connected to the Conservation Corps.

The garden that this farm partner is referring to is a program of the City of Fort Collins and the Parks Department who contract the LCCC to do maintenance on trails on city owned property. The LCCC also began sending their trail crew to work at other urban agriculture projects when in between contract work. The farms that the LCCC work with during this time had a personal relationship with the corps manager. Both host farms and corpsmembers enjoyed their time working on area farms and the idea for the AgriCorps program grew out of this work.

Urban farms are a natural extension of the conservation corps program structure. The United States is becoming increasingly urban with 81% of the population living in an urban area with a population of 50,000 or greater (Census 2010). Increasingly, urban residents are producing their own food through backyard and community gardens, and productive urban farms. Collectively these urban gardens and farms can be thought of as what McClintock (2014) calls urban agriculture projects that have many different functions and applications including: food production; recreation; community building; education; rehabilitation; skills building; food security; food justice; and the creation of edible landscapes (McClintock 2014: 4). Urban agriculture projects provide an opportunity to provide an experience working in nature without having to travel outside of the urban boundaries. The work on farms lends well to the conservation corps structure; there is physicality to the work, attention to detail is required, teamwork improves efficiency, and work occurs in a natural setting, all things that characterize trail based conservation corps programs.

⁷ Though the Larimer County Conservation Corps dropped the word Youth from their name in 2013, many of the original farm partners still refer to them as the LYCC or LCYCC.

Urban farms can be educative spaces for urban youth. Urban farms and gardens expose youth to natural processes such as, “growth and decay, predator–prey relations, pollination, carbon cycles, soil morphology, and microbial life: the simple and the complex simultaneously” (Blair 2009:17). AgriCorps participants have an opportunity to learn food production techniques such as direct seeding, transplanting, cultivating/weeding, and harvesting different types of plants. Attentive participants are given information in the field on topics such as soil fertility, organic pest control, invasive species, seed saving, water scarcity, and information about native flora and fauna that populate the farm. However, these lessons about the natural world are not overt and require that the adult supervisors working with youth on the farms are actively educating in the field and that participants are willing to engage.

It is unclear to me what new knowledge about food, agriculture, and nature the LCCC hopes participants will take away from their work on farms. The goals and objectives of the organization seem largely focused on professional and personal development, and fail to address how the program should educate about the social and environmental contexts of urban agriculture. The broad language of, “increasing interest in environment and/or community,” gives crew leaders and farm partners little direction for which of the great number of topics relate to food and farming they should cover with the AgriCorps participants. Though the AgriCorps exposes participants to a variety of different types of urban agriculture project types and different aspects of the food system through structured educational activities, there are few opportunities for participants to tie it all together. This is problematic because as Levison (1990:72) points out:

Service without knowledge, without an understanding of the ‘embedded inequalities’ of our society, means, for example, that students are unable to make connections between the plight of the poor and social policies.

Because the program does not have a classroom component, many participants do not engage with the learning opportunities presented in the AgriCorps program and do not leave the program with an understanding of relationship between food, society and environment. In this regard, the AgriCorps program

is not providing the level of engagement that Levison (1990) claims is necessary for a program to be considered service learning and may be more appropriately labeled community service.

Food systems are complex and teens working within the food system should have opportunities to better understand the how complex these systems are. The four week, half day structure, of the AgriCorps program does not provide enough time to adequately engage participants with the larger social-environmental issues in the food system. In order for this to be achieved, program length would need to be increase, and a classroom component added, both of which would significantly change the nature of the program, and are not recommended. My concern is rather with the use of the term service learning, which implies a greater deal of engagement than the AgriCorps can provide, instead of service opportunity or community service terms, which might more accurately describe the program.

Chapter 5: Summary and Implications

This case study drew upon a variety of different data sources to document and analyze the AgriCorps program of the Larimer County Conservation Corps (LCCC) to better understand how participation in urban agriculture projects can facilitate youth professional development. The AgriCorps program engages 16 youth, ages 14-16, in 80 hours of service over four weeks on urban farms in Larimer County Colorado. The goals of the program are personal and professional development, increasing knowledge and awareness of issues relating to the environment and community, and completing meaningful long-lasting conservation work in Northern Colorado. Participants work from 7:30am to noon, four days a week, rotating daily to different urban farms and public gardens, where they complete a variety of different tasks including planting, harvesting, weeding, and special projects. In addition to work, participants also engage in structured educational activities and informal education in the field where they are presented opportunities to learn about the social and environmental context of food production. Some activities were structured as talks with crew leaders and farm partners, while others included a tour or workshops with outside agencies.

Additionally, this research assessed achievement towards the goals and objectives defined by the LCCC for the AgriCorps program. Two of these three goals were achieved by the organization. The second goal, "To increase participant's knowledge and awareness of community and environmental issues through education and service learning," was not successfully met given the objectives stated by the organization. The first goal, "To promote self-sufficiency in youth and young adults through skill development for personal and professional growth," was met. The third goal, "To complete meaningful and long lasting conservation projects in Northern Colorado that benefits our environment and commu-

nity,” was harder to assess given the data collected by the organization. The objective for this goal however, was met, and the support of urban farming projects in and of itself is contributing to conservation projects in Northern Colorado.

Professional development is a central component of youth conservation corps programs. Professional development is clearly linked to goal one. There were two objectives related to this goal, one for corpsmembers to leave with a tangible record of service, a resume, and two to demonstrate growth in transferrable professional and personal skills. These goals and objectives were met by the organization. Corpsmembers themselves also seemed best able to comment about lessons learned related to professional development in reflection worksheets, entrance and exit surveys, and goal setting exercises. Professional development occurred through general program structure, regular performance evaluations, and through a resume writing workshop. AgriCorps program participants were introduced to the hiring process through the submission of an application and a formal interview prior to being accepted into the program, and the completion of a resume-writing workshop during the program session. 94% of participants completed the resume writing workshop and left the program with a resume and all reported feeling more confident in their ability to navigate the hiring process when applying for future work because of the program. Participants improved soft skills such as teamwork, communication, and adhering to safety protocol, satisfying objective 1b of 75% of participants showing growth in transferable personal and professional skills. Corpsmembers have individual evaluations with crew leaders twice during the four-week session where they complete a self-evaluation, set goals related to personal development, and are evaluated by their crew leaders in five categories. Through this evaluation process, corpsmembers learn to both self-evaluate and accept feedback and constructive criticism further preparing them for the workforce. Additionally, all corpsmembers must adhere to a set of guidelines outlined in a member handbook that include dress code, safe tool use, and behavior expectations. The handbook outlines and reinforces a conservation corps culture that promotes professional development in and of itself.

Professional development is the greatest strength of the AgriCorps program in large part because of the conservation corps culture and corps structures that shape program activities.

It is less clear to me how well the AgriCorps program increases participant knowledge and awareness of community and environmental issues. Survey results indicate that participants are not increasing interest or awareness of community and/or environmental issues as outlined by the organization in objective 2.1. In fact, there was an overall negatively relationship between participation in the program, and support for the statements about the environment and agriculture assessed in question 15 on the entrance and exit survey. Given the amount of structured and unstructured education corpsmembers received on food and agriculture, the negative relationship is surprising.

Though participants are given opportunities to learn about some of the more complex issues regarding food production, few participants demonstrated levels of engagement with the topics in reflection worksheets or during my observations. Food systems are very complex, and teaching about them not an easy task. Much of the education about the food system was completed by crew leaders, who had varying levels of education and experience related to the topics, or by farm partners, who although well versed, were given little guidance as to what topics to discuss. This related to a lack of clearly defined learning objectives related to the organizations second goal of increased participant knowledge and awareness of environmental and/or community issues. Objective 2.1, "By service completion, 70% of corpsmembers show an increased interest in environment and/or community," for example cannot be easily measured using the tools available to the organization. The terms 'environment and/or community' is too broad, and the four-week time duration of the program too short to expect measurable change. If the LCCC had clearly defined objectives for the AgriCorps program such as, "70% participants will leave the program able to diagram how food gets from farm to table," or, "70% of participants can define food dessert," then all educational activities during the season could center on these topics and reflection prompts could be drafted to promote active reflection, solidifying lessons learned. Specific

questions related to these concrete objectives could be included in the entrance and exit surveys allowing for the organization to better comment on whether lessons about the environment and community are being absorbed by the corpsmembers.

My understanding is that the LCCC wanted to give room for an organic evolution of topics covered by farm partners and crew leaders that would fit the interests of the corpsmembers. This is problematic in that topics covered are scattered and disjointed and there is inadequate time to reflect on the relationship between what is being taught during these activities and the work they are doing in the field. Interviews with farm partners revealed openness to being more actively involved with structured education and reflection with the corpsmembers, so long as the LCCC provided some direction for which topics they should cover. Two farm partners listed wanting to be more actively involved in end of day reflections to get a better sense of what corpsmembers were interested in so they could focus more on those topics in the field. Much of the education with the AgriCorps program happens during informal talks with farm partners in the field. Having central themes to touch on would bring some cohesion to this educational tool, perhaps improving learning outcomes regarding new knowledge and increased interest in environmental and community issues.

Lastly, the AgriCorps program provides a productive workforce for urban farms and garden to execute labor-intensive sustainable farming practices contributing to meaningful and lasting conservation projects in Northern Colorado, the third goal of the organization. Corpsmembers were required to complete 80 hours of service during the four-week program in order to receive their stipend. All 16 participants completed this requirement, satisfying objective 3.1 for the LCCC. The AgriCorps crews provide approximate 200 hours of free labor per four-week session to each host farms through which they complete a variety of small tasks, such as weeding, harvesting and planting, and special projects, such as fence construction and garden bed preparation. Farm partners report that the crews are very productive and regularly exceed their expectations for what can be done in a day. That being said, all farm partners

commented on how productivity was directly related to motivation and interest, which was at times hard to capture. Hosting the AgriCorps requires a great deal of time and energy both while the crew is at the farm, and beforehand preparing for their arrival. Farm partners create tasks lists that they think will keep the corpsmembers engaged while also meeting their needs as productive farms. One farm partner lamented during an interview about how difficult it is to balance their needs with the attention span of the AgriCorps participants, commenting that this particular season was especially challenging. It is important to note that farm partners interviewed for this project commented that their interest in hosting the AgriCorps stems from a personal or organizational commitment to education. If the farm partners did not have such a commitment, hosting the AgriCorps may not be in their best interest because of the amount of work involved with hosting the crew.

Urban farms are an appropriate setting for youth conservation corps seeking to engage younger youth through half day programming. There is less time spent on transportation to farms than there would be to access natural areas, parks, and forests where conversation corps crews typically work. Farm work, much like trail work, is physically demanding, often repetitive, and requires participants work in teams, which facilitates the development of soft skills such as leadership and communication.

Project Limitations

There were a number of limitations to this study regarding organizational commitment, program size and duration, and data collection. I went into this study with intentions of helping the organization draft measurable learning objectives to better assess learning outcomes. Though work to draft learning objectives was begun during my internship, the final objectives used by the organization were drafted without my input. The objectives drafted by the organization were difficult to measure and did not provide meaningful insight into learning outcomes. The priorities of the LCCC seemed to shift from when

this research project was initially introduced in the fall of 2013 and the spring of 2014 when data collection procedures were being developed. The LCCC was experiencing a great deal of growth in 2014, adding on a new program and three additional crews that were focused on recovery projects stemming from a September 2013 flood that ravished Larimer County public lands. Support for this a study such as this, designed to assess the one program unrelated to disaster recovery work, took a back seat as a result.

Program size and schedule made it difficult to gather sufficient data to make any generalizable claims about the outcomes of the program. Given the small number of program participants and farm partners, a multi-season study would have been a more appropriate way to evaluate the program. Also missing from the study were the perspectives of previous seasons corpsmembers. Two focus groups with former AgriCorps participants were scheduled and participants contacted. Though four participants agreed to participate, none actually attended the scheduled focus group; two gave notice that they could not attend, and two simply did not show up. Talking with former corpsmembers would have provided more insight into how the AgriCorps program impacted workforce readiness, community engagement, and environmental awareness post program.

Mid-season staff evaluations were completed on the wrong form for the July session. Crew leaders wrote in their responses to the evaluation questions on the corpsmembers self-evaluation form rather than completing a staff evaluation form prior to the individual evaluation. Though similar, staff and self-evaluations differed in the number of questions in each category and phrasing of questions. Therefore, change from mid-season to final staff evaluations could not be assessed for both sessions, which skews the conclusions that can be made about growth in transferrable personal and professional skills. The four-point scale used in these evaluations appeared to be insufficient for crew leaders, who often would circle in between 'requires improvement,' and 'meets expectations,' or 'meets expectations,' and

'exceeds expectations.' These responses were coded down rather than up, but did not capture the intended response of the crew leaders. Having more points on the scale would have allowed for a more nuanced understanding of growth in soft skills assessed through these evaluations.

Exit surveys during the second term were administered in the field on the last day of the program just prior to the end of season potluck hosted at the community garden I managed. I observed participants hurrying through the exit survey so they could rejoin potluck preparations. One particular participant drew a straight line through the neutral column on all of the environmental attitude questions in the exit survey and did not complete the last three questions in the exit survey. This hurried environment likely produced less thoughtful responses than participants experienced when completing the entrance survey indoors during orientation. The negative relationships between program participation and environmental interest and behavior noted in some survey questions may have been evidence of survey fatigue. I personally administered the entrance surveys for the first term AgriCorps participants during the orientation and stressed the importance of leaving thoughtful responses and thoroughly completing the survey. The entrance survey was administered by crew leaders during the second term at a scheduled time during orientation inside at the LCCC offices. I would recommend that exit surveys be administered in the LCCC offices on the second to last day of the program to ensure more thoughtful responses.

In addition, issues with survey administration, there were several limitations to the redesign of the survey itself. The survey was constructed to document background information related to workforce readiness, community involvement and environmental attitudes and behaviors. The LCCC staff wanted evaluation instruments that could be easily analyzed and utilized for all program areas. For this reason, questions on the survey about environmental attitudes were more geared towards the education that the land crews would be receiving through the program and were not necessarily reflective of environmental awareness activities presented to the AgriCorps crews. Because of this, there was no way to capture what basic gardening skills or basic farm to table knowledge participants came into the program

with or what growth they saw in these areas. Second, there was no concrete way to measure community engagement in the survey. We opted to measure this category by looking at involvement in community service and 4 likert questions about feelings towards community efficacy. Lastly, there is limited data on post-corps employment. Efforts to track post-corps employment have been limited to a question regarding intentions to obtain future employment post corps and do not necessary reflect real patterns of employment.

Lastly, the reflection worksheets may have not the best way to engage corpsmembers in active reflection. The format of the worksheets was the same regardless of the activity or project they were reflecting on. Not all questions on the worksheets were applicable to all activities, which skewed the responses. Many participants gave short, uninspired, and at times irrelevant responses to the prompts that provided little insight into what they were actually learning or experiencing. Had the corpsmembers been given time to journal with prompts directly related to the education activity, responses may have been more profound and shed more light on what was learned. Additionally, there was some confusing terminology on the entrance and exit survey reflection worksheets. Participants were asked to outline the steps in the food system in words, pictures, or diagrams. Many participants drew a food pyramid, a food chain, or other responses. A better way of phrasing that question would be to describe how food gets from farm to table in words, pictures, or diagrams. Though efforts were made to present these reflection worksheets and the survey to a small focus group of former participants, the timeline of this project and the program prevented such focus group from being held. In the final evaluations, many corpsmembers reported wanting to spend less time on the reflection worksheets. In general, corpsmembers seemed uninterested in spending time on reflection, which seemed too much like school, and overall engagement was low.

Recommendations

Programs interested in using urban agriculture projects as a platform for youth development should set clear and measurable learning objectives prior to the beginning of the season. These learning objectives will help guide the flow of the program and will provide direction for crew leaders and farm partners when working with participants in the field. Objectives should cite specific, measurable change in knowledge, behavior, or skills, and should be relevant to the work being done on farms. It is important to educate farm partners about organizational goals and objectives and to set clear expectations for balancing work and education on farms. There are many technical, social, and environmental aspects of the food systems that are difficult to adequately address in programs with short durations. Narrowing in on a small subset of these issues will help focus the program and improve learning outcomes. I reworked the objectives for the LCCC's three goals in Appendix G as an example of how to tailor measurable objectives.

Program length should be appropriate to achieve the stated learning goals and objectives. If the program is looking to produce a lasting impact on participant's relationship to food, four weeks may be too short. Many farm partners commented on how it was difficult to see the full life cycle of a plant from seed to harvestable fruit or vegetable. An eight-week program, for example, would give participants more opportunities to take ownership over certain aspects of the farm or garden and to see a more direct impact of their participation. Many farm partners commented on how seeing a crop go from seed to table might help motivate participants when completing redundant work such as weeding. Additionally, relationships between corpsmembers and farm partners, crew leaders, and other corpsmembers take time to develop. Many farm partners commented on feeling most confident in their ability to direct and engage the corpsmembers in the last week of the program. I also noticed a shift in how participants talked about their fellow corpsmembers through the season, referring to them as friends only

in the last week. Crews are often very diverse and building relationships can take time. Development of skills related to teamwork, communication, and leadership may increase with a longer duration as well.

Youth development programs on urban farms should provide opportunities for participants to eat the food that they are helping grow through their work on the farms. Programs should pay attention to the kinds of foods participants are eating on site and be prepared to offer plant-based alternatives to processed foods. Many participants in the AgriCorps program brought highly processed foods to eat during breaks. This is not surprising given the research that shows that youth are more likely to choose foods that taste good without regard for nutrition (Neumark-Sztainer et al. 1999), without the intervention of a supportive home environment and a community that encourages healthy eating (Berge, J. M., Wall, M., Larson, N., Forsyth, A., Bauer, K. W., & Neumark-Sztainer 2014). Many AgriCorps participants were given opportunities to try raw produce, fresh from the field, which is perhaps not the most palatable way to introduce new foods to participants who are unaccustomed to eating them. Farm partners provided farm fresh dishes during the end of season potluck that highlighted some of the foods the participants grew on the farm. Several participants were even given an opportunity to help cook the foods for these events. This could be a great way to tie together the work that the corpsmembers are doing to grow the food to the food that they are actually consuming. Unfortunately, this potluck occurred on the last day of the program, and participants did not have many other opportunities outside of the program to eat the foods they were helping to grow. Programs that work with youth of all ages on farms should find ways to incorporate eating the fresh fruits and vegetables along with caring for them in the field. One farm partner suggested that the program should be 6 hours long and include a lunch break with the farmer where they could spend more time talking about food and eating. My feeling is that participants would have a more meaningful experience if they could connect the work that they did on the farms to the everyday act of eating.

Programs working with farm partners⁸ should be very thoughtful in their selection of host farms, and aware of the time commitment involved. It is important to consider the farms experience hosting volunteers, experience working with you, and understanding of the educational goals and objectives of the program. The LCCC included these criteria and in their application for host farms to make sure that the experience was beneficial for both the farm partners and the corpsmembers. The corps manager at the LCCC described stories of host farms in previous seasons who had corpsmembers spend all of their time weeding, or performing tasks that were inappropriate given the age and skill level of the crew. It is also important for organizations and farm partners to be aware of the time commitment associated with hosting the AgriCorps. One farm partner felt that the LCCC staff was unaware of how much time went into planning for the AgriCorps to be at their farm.

It requires an enormous output on our part to host, and think that surprised them [LCCC staff] a little bit. It's a lot of planning, it's a lot of logistics, it's a lot of staging. We reserve some tasks to make sure that those are there for them. We reserve some harvests that will hold so that they will have that opportunity. And from our standpoint, it is a significant amount of staff time and energy.

If a farm partner is unprepared for the time and energy that they will have to put into hosting the program, expectations will not be met. It is important for program planners to clearly communicate expectations regarding staff time, assigning tasks, and participation with in field and structured education. Farm partner selection is among one of the most important factors in determining learning outcomes surrounding new food system knowledge because of the active role they play in educating in the field.

Implications

The AgriCorps program is one example of a youth development program using urban agriculture projects as a venue for workplace development. Better understanding of how this program functions can

⁸ Rather than operating their own farm or garden, a program model used by other youth development programs on urban farms.

benefit other youth development programs working on farms. The melding of conservation corps structure and urban agriculture projects can potentially be replicated and expanded to serve a greater number of urban youth. The conservation corps structure provides a container for professional development that can prepare teens and young adults for the workforce beyond what can be gained through community service or in a classroom. As competition for jobs increases, having work experience, a professional resume, and experience with the hiring process will benefit program participants in the future. The AgriCorps model can be replicated by other youth conservation corps around the county looking to expand their offerings to younger youth as well as by urban agriculture projects looking to improve their youth development programs.

As an action research project, this research also served to benefit the LCCC as an organization. Through this research, data collection procedures for the LCCC were improved and new ways of analyzing individual growth over the course of the season were introduced. Additionally, this research provided an opportunity to reflect upon the successes and areas for growth of the program. Lastly, I have provided suggestions for how to improve objectives for the program to be easier to measure using the survey and evaluation used by the organization.

Directions for Future Research

The impact of urban agriculture based youth development programs could be further assessed through either a longitudinal study of former program participants or a comparative study of several different programs. A longitudinal study to explore the impact of participation in the AgriCorps program on attitudes, behaviors, and employment in adulthood would add to our understanding of the relevance of urban agriculture based youth development programs. It is hard to assess what kind of impact the program had on attitudes and behaviors surrounding food consumption with the data collected for this project. Additionally, participants in the AgriCorps program are too young to make meaningful decisions

about the kinds of foods they consume, much of which is purchased and prepared by their parents. Having questions specific to fruit and vegetable consumption, community garden participation, and direct from producer purchases would help us better understand the long-term impact of having this age group interact with urban agriculture. Additionally, it would be interesting to see what kind of impact that program participation has on employability, college participation and major selection, and career path. Specifically, I would be interested to see if working on urban farms inspired any to become urban farmers. Urban farming, though rewarding on many levels, is not a financially secure career trajectory for many, and encouraging youth to pursue that path may not be in their best interest. These questions could be addressed through a survey, interviews, or focus groups. Researchers conducting longitudinal research on youth conversation corps have struggled to maintain accurate contact information for youth in their programs, many of who have moved away to attend college. Indeed, the Larimer County Conservation Corps has struggled to keep current phone numbers and email addresses for former participants after they move out of their parent's home. If a database of accurate email addresses could be maintained, an online survey with incentives for completion would be the best way to reach the greatest number of former participants.

A comparative study of the impact of various urban agriculture based youth development programs on agricultural literacy and workforce readiness would be beneficial for both researchers and program directors. It would be interesting to compare soft skill development across programs with different program structure than the conservation corps model. This research highlighted how the driving factor of professional development in the AgriCorps program were structures common to all youth conversation corps. Comparing workforce readiness for participants of different youth development program types that use farms to teach about social justice or academic skills would provide greater insight into the impact of the conservation corps structure on professional development. It would also be interesting to assess how program elements such as duration, age range and program structure impact the

learning outcomes of various farm-based programs. Using a metric such as agricultural literacy would highlight how different program elements influence learning outcomes related to knowledge and understanding of food system issues. Agricultural literacy, developed by Frick, Kahler, and Miller (1991), is a comprehensive metric for knowledge of agricultural processes that includes 11 topical areas: agriculture's relationship to the environment; the processing of agricultural products; public policies surrounding agriculture; agriculture's relationship with important natural resources; production of animal products; societal relationship with agriculture; production of plant products; economic impact of agriculture; the marketing of agricultural products; the distribution of agricultural products; and the global significance of agriculture. Using this metric would help evaluate the value in hosting youth development programs on urban farms in terms of increased knowledge and awareness of agricultural issues, not just professional development.

Figures

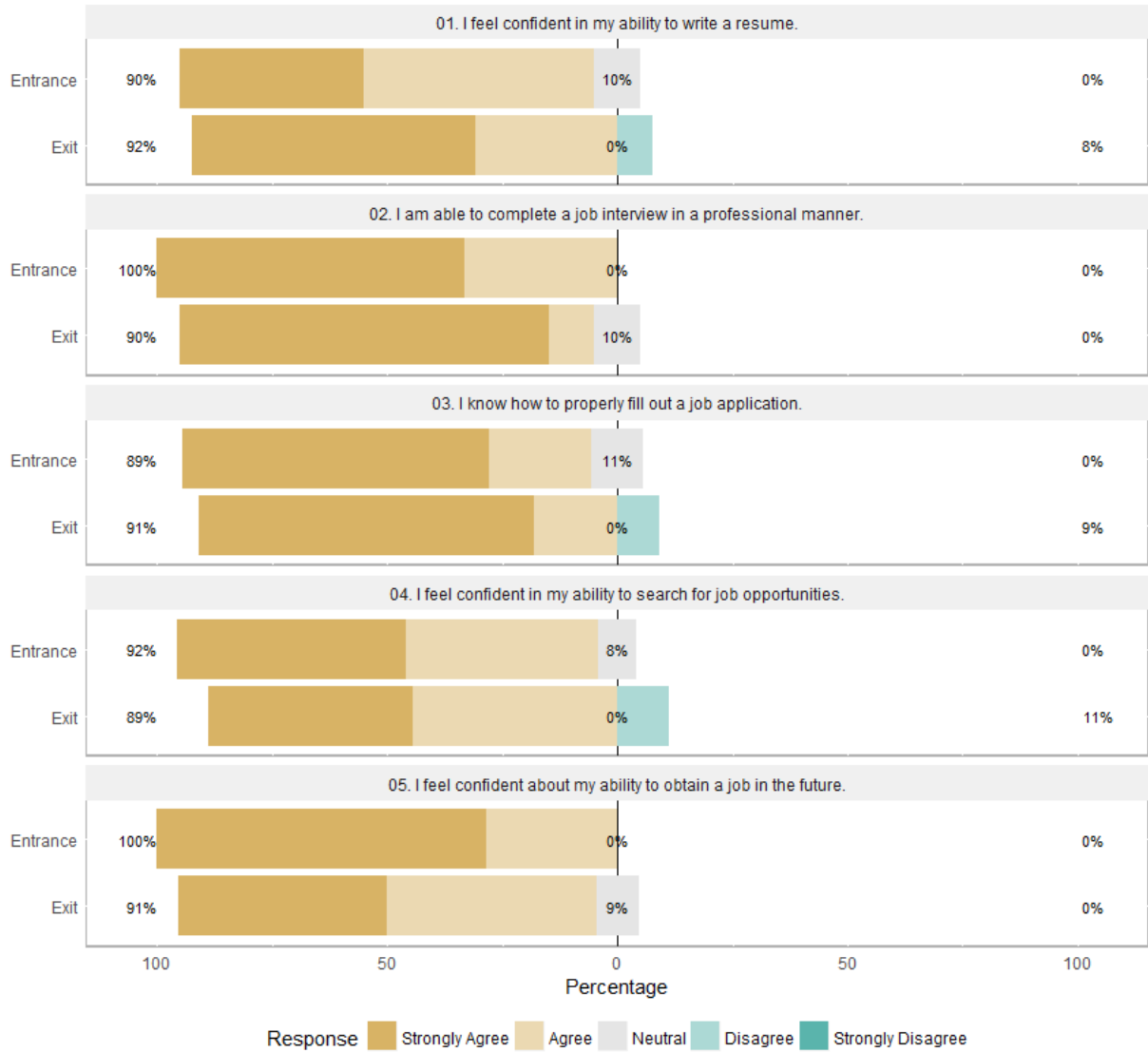


Figure 4.1: Corpmember Entrance and Exit Survey Responses: Employment

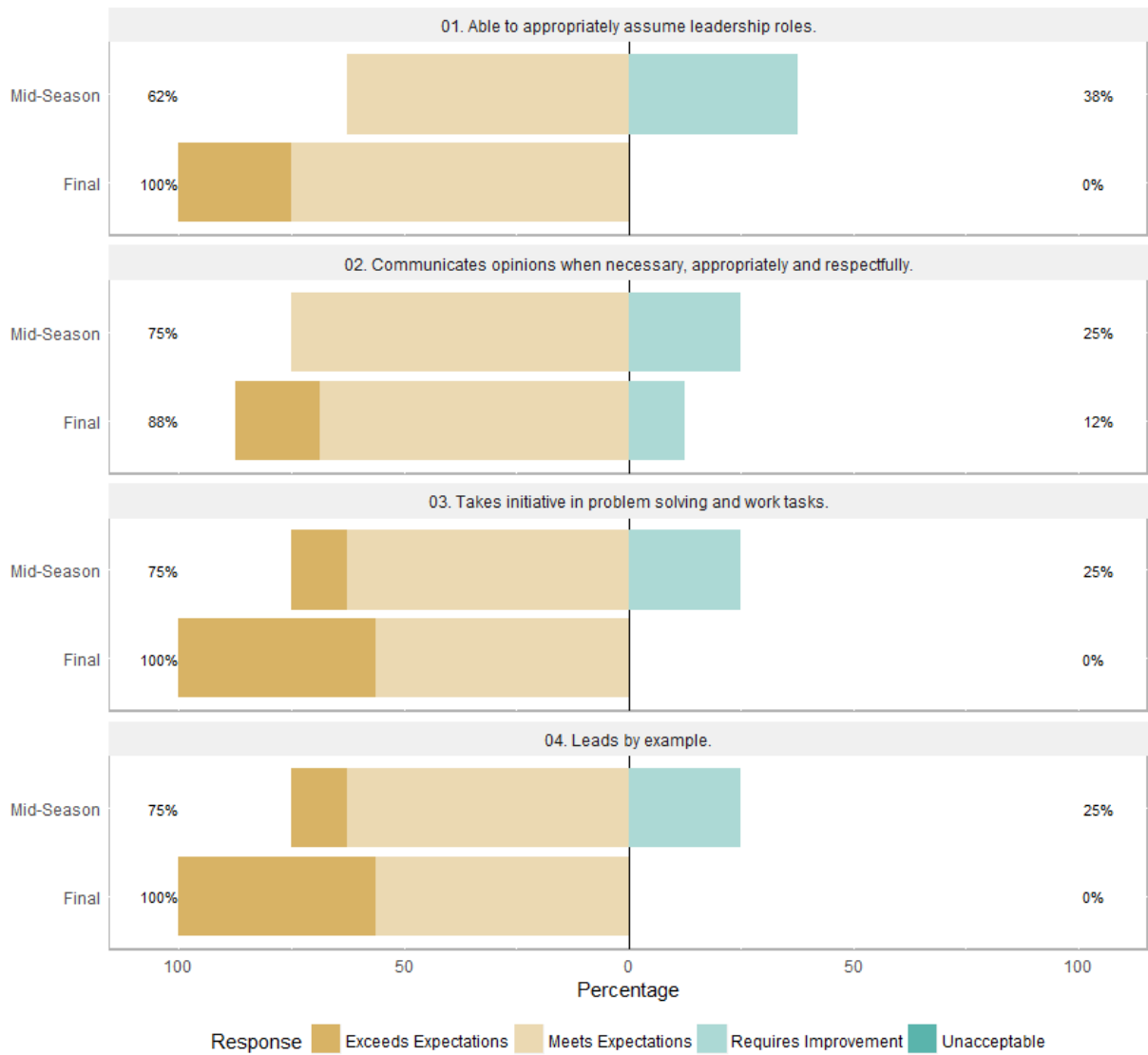


Figure 4.2: Staff Evaluation Responses: Leadership

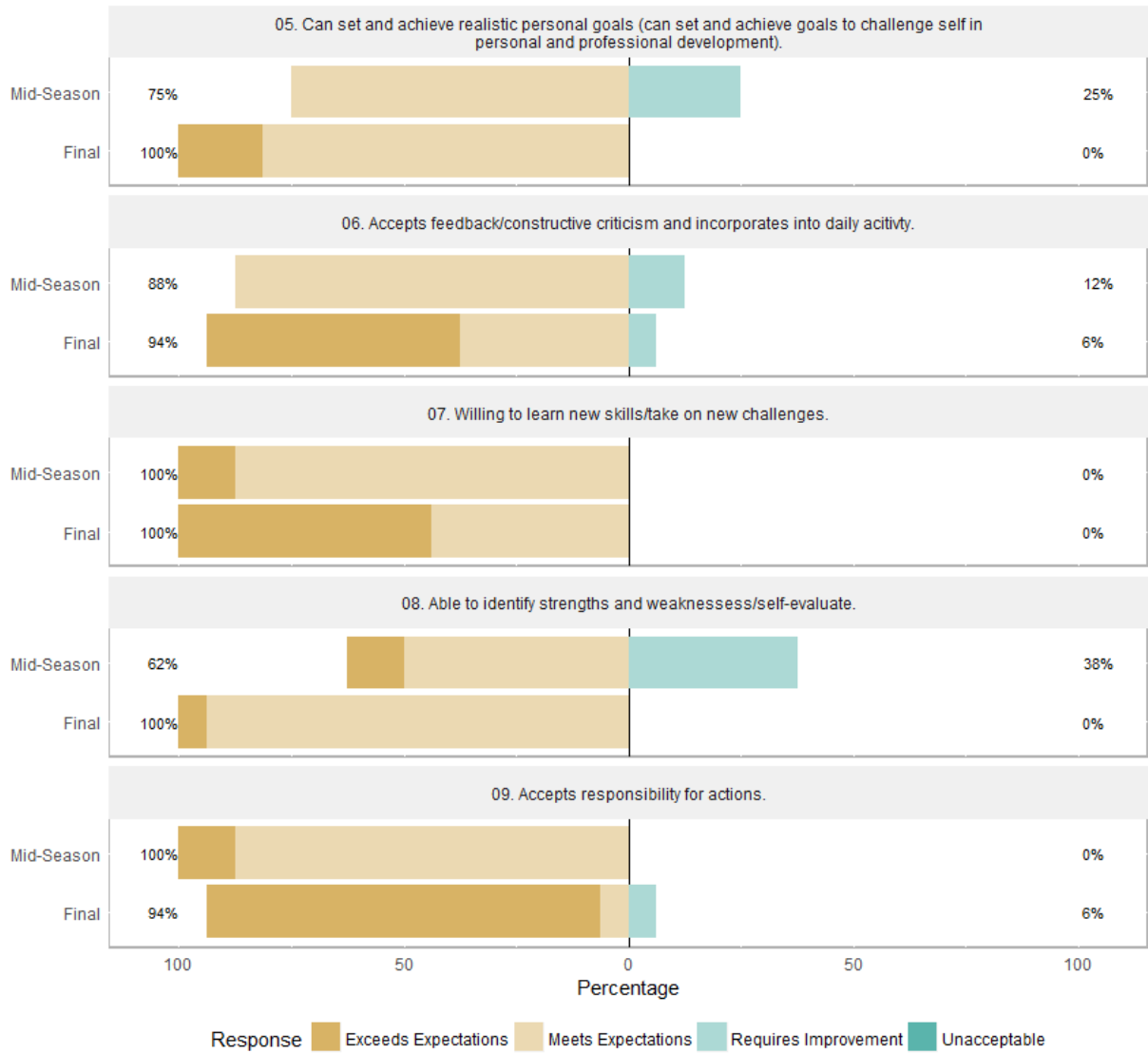


Figure 4.3: Staff Evaluation Responses: Personal Growth

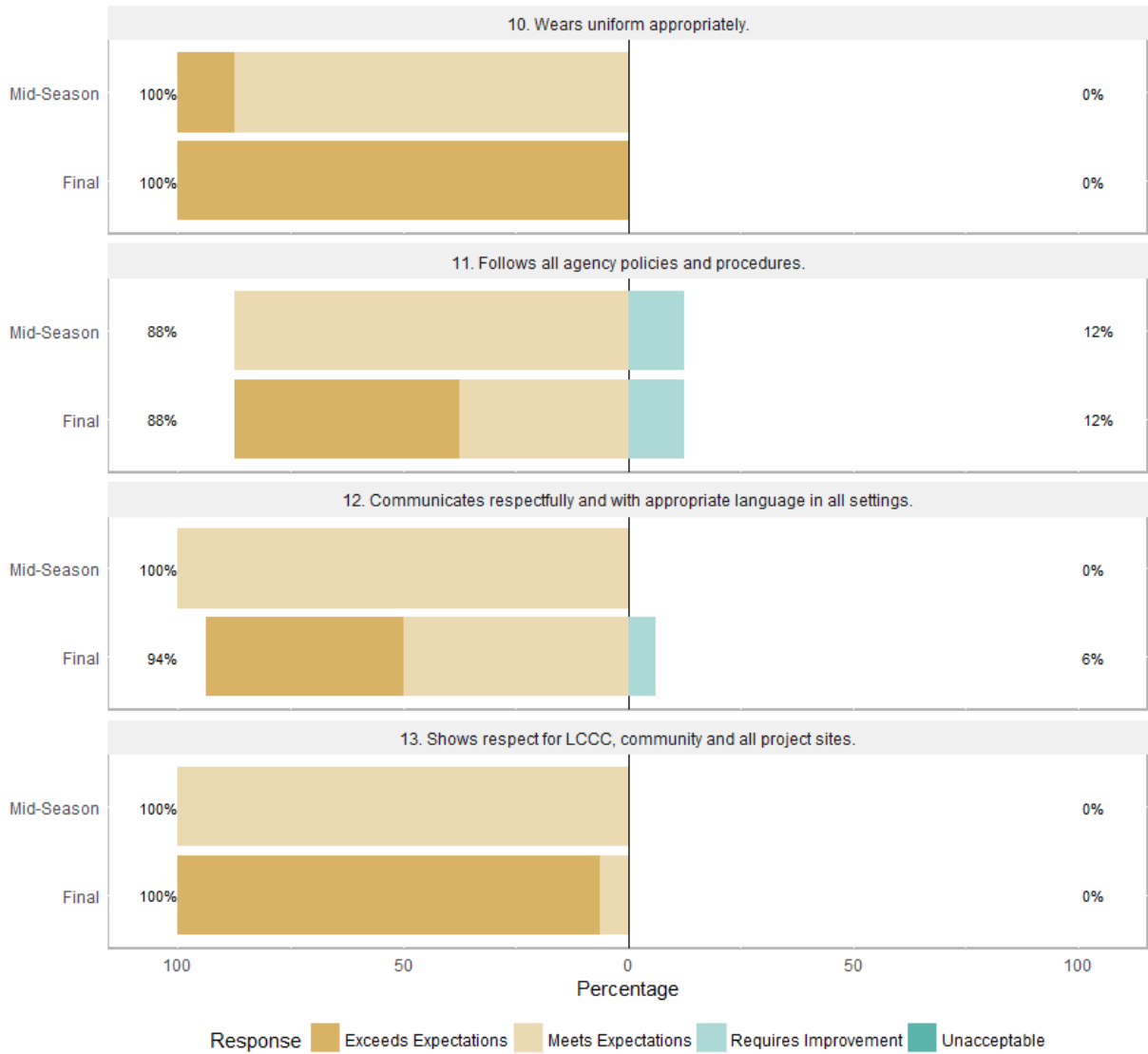


Figure 4.4: Staff Evaluation Responses: Professionalism

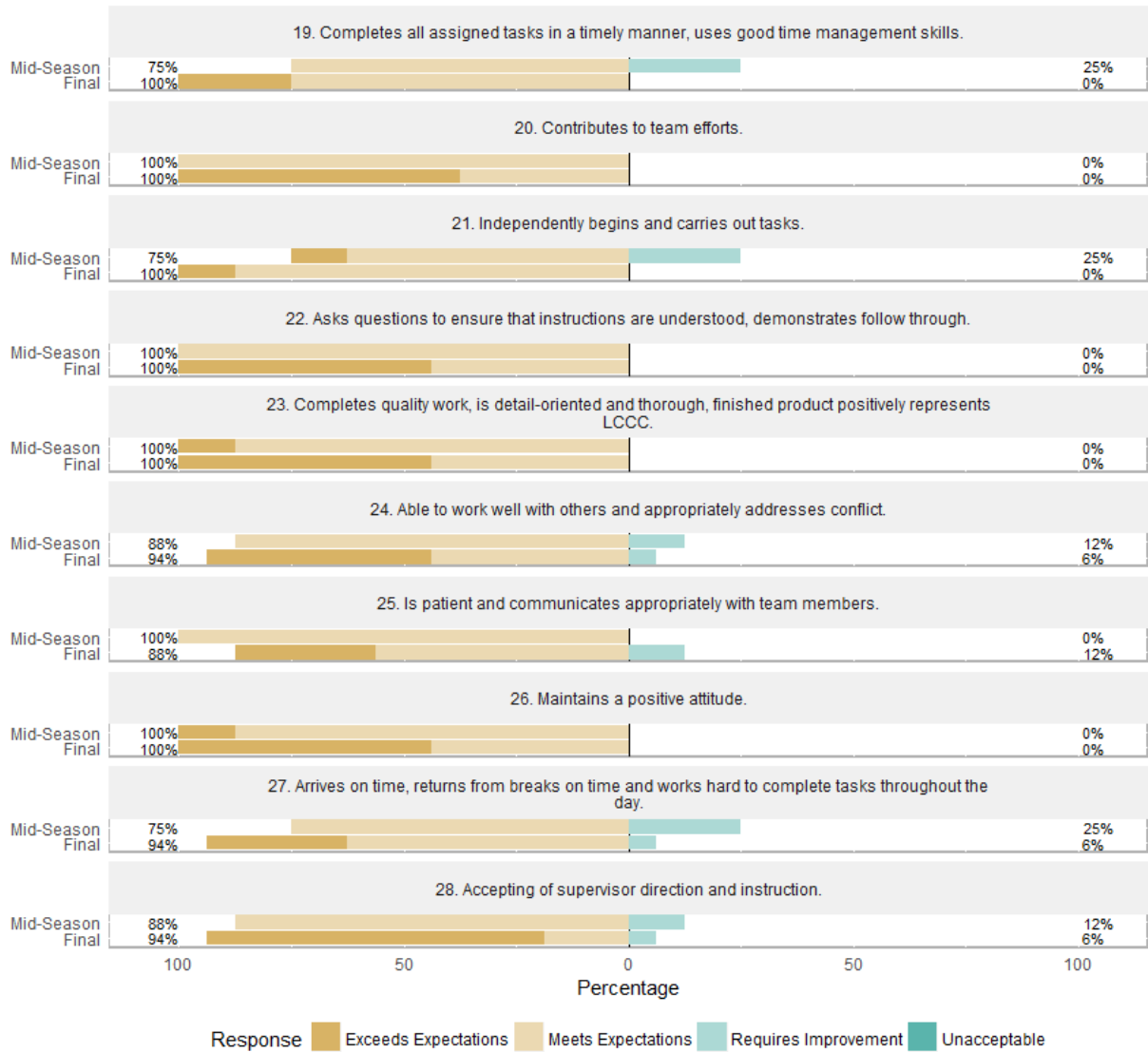


Figure 4.5: Staff Evaluation Teamwork and Work Ethic

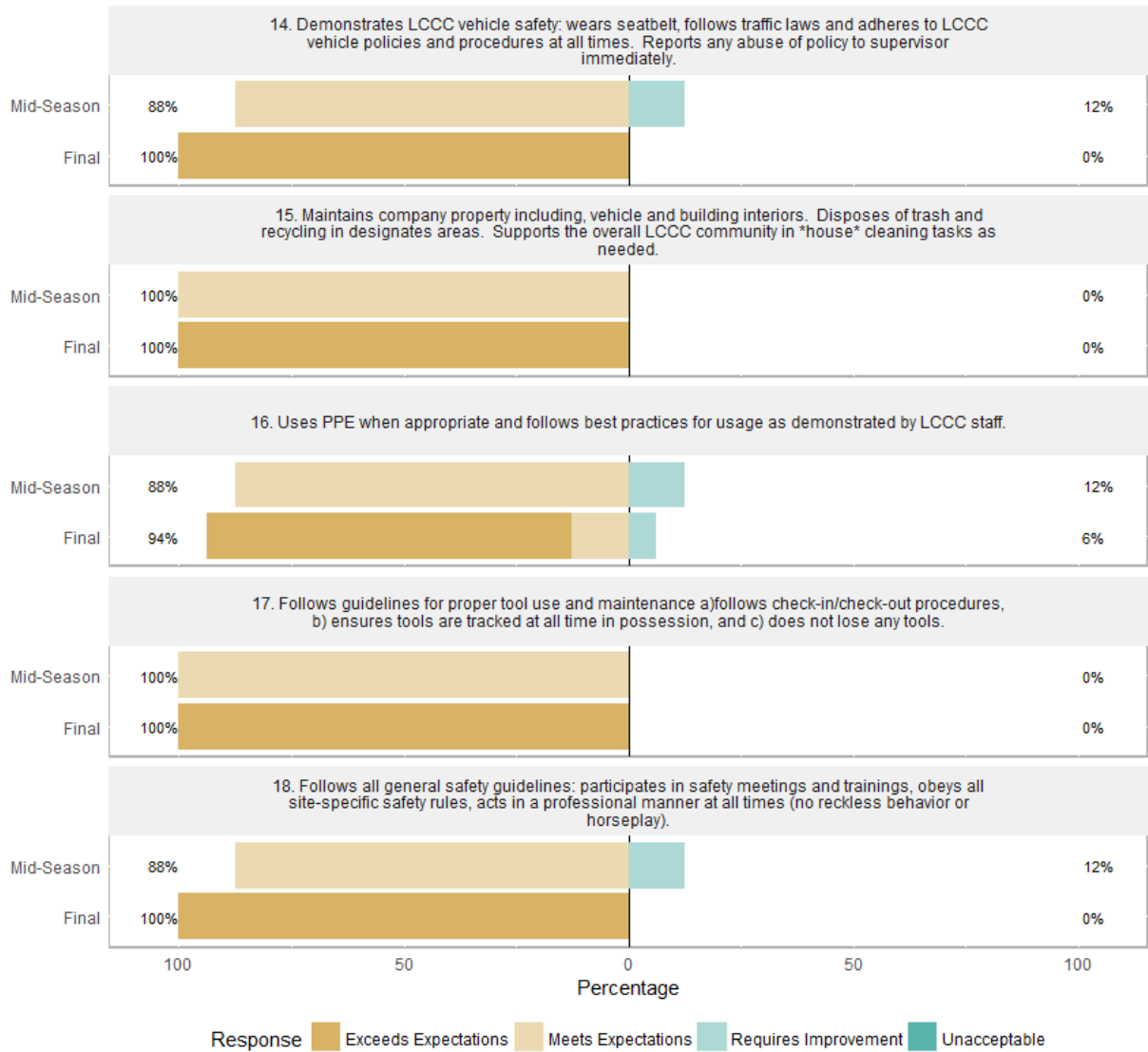


Figure 4.6: Staff Evaluation Responses: Adherence to Safety Protocol

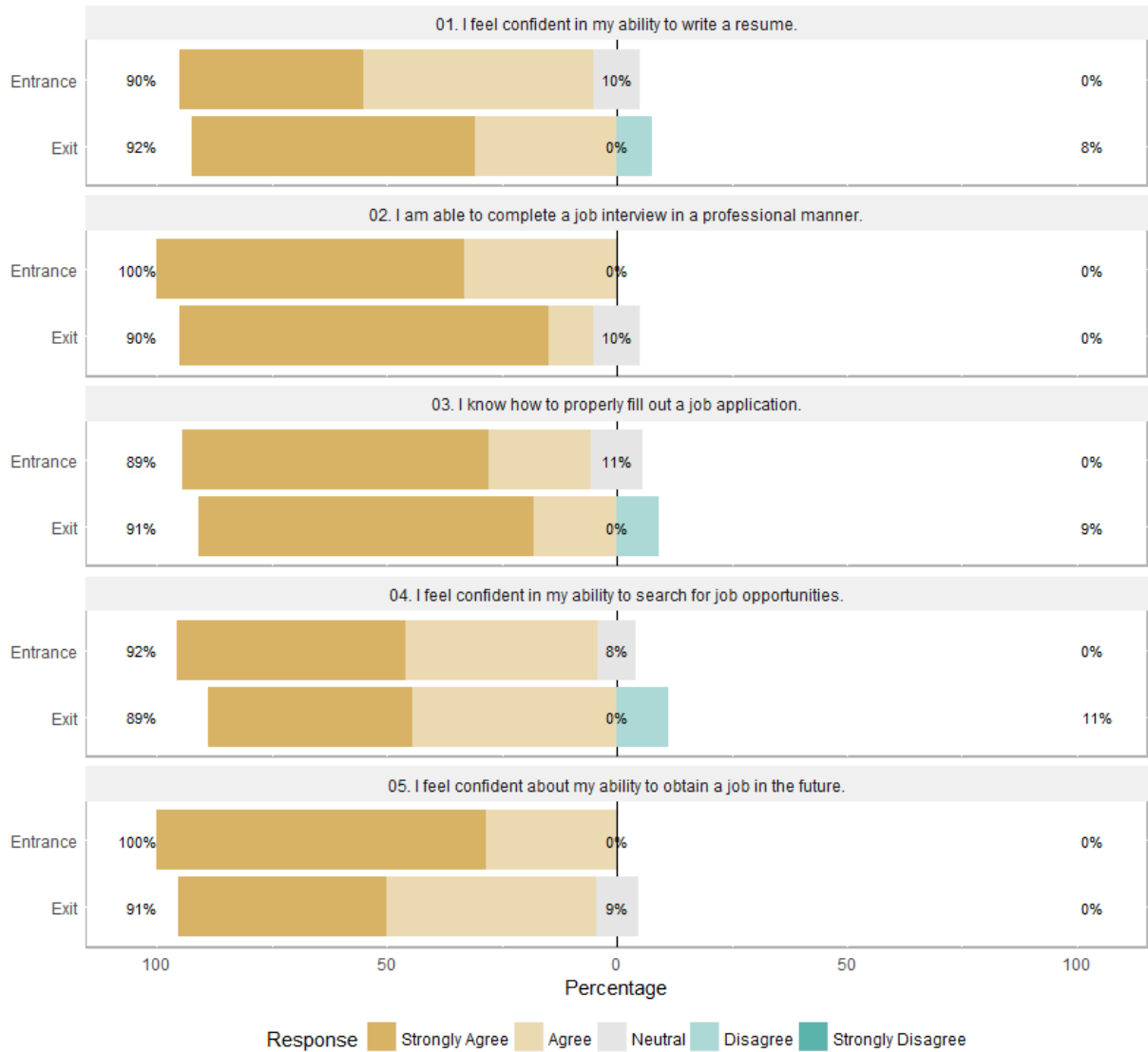


Figure 4.7: Corpsmember Entrance and Exit Survey: Employment (question 7.1-7.5)

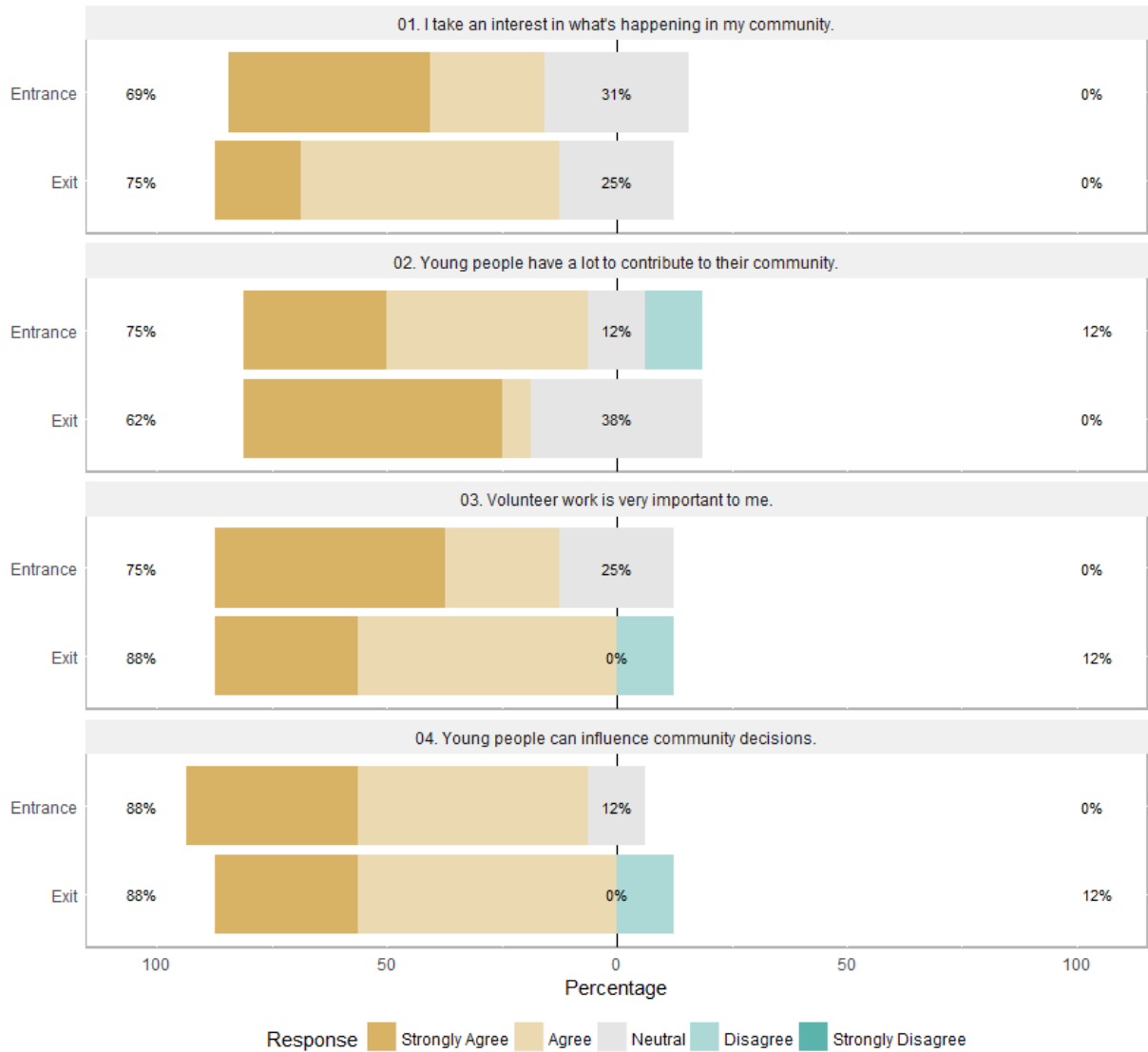


Figure 4.8: Corpsmember Entrance and Exit Survey: Community (Questions 12.1-12.4)

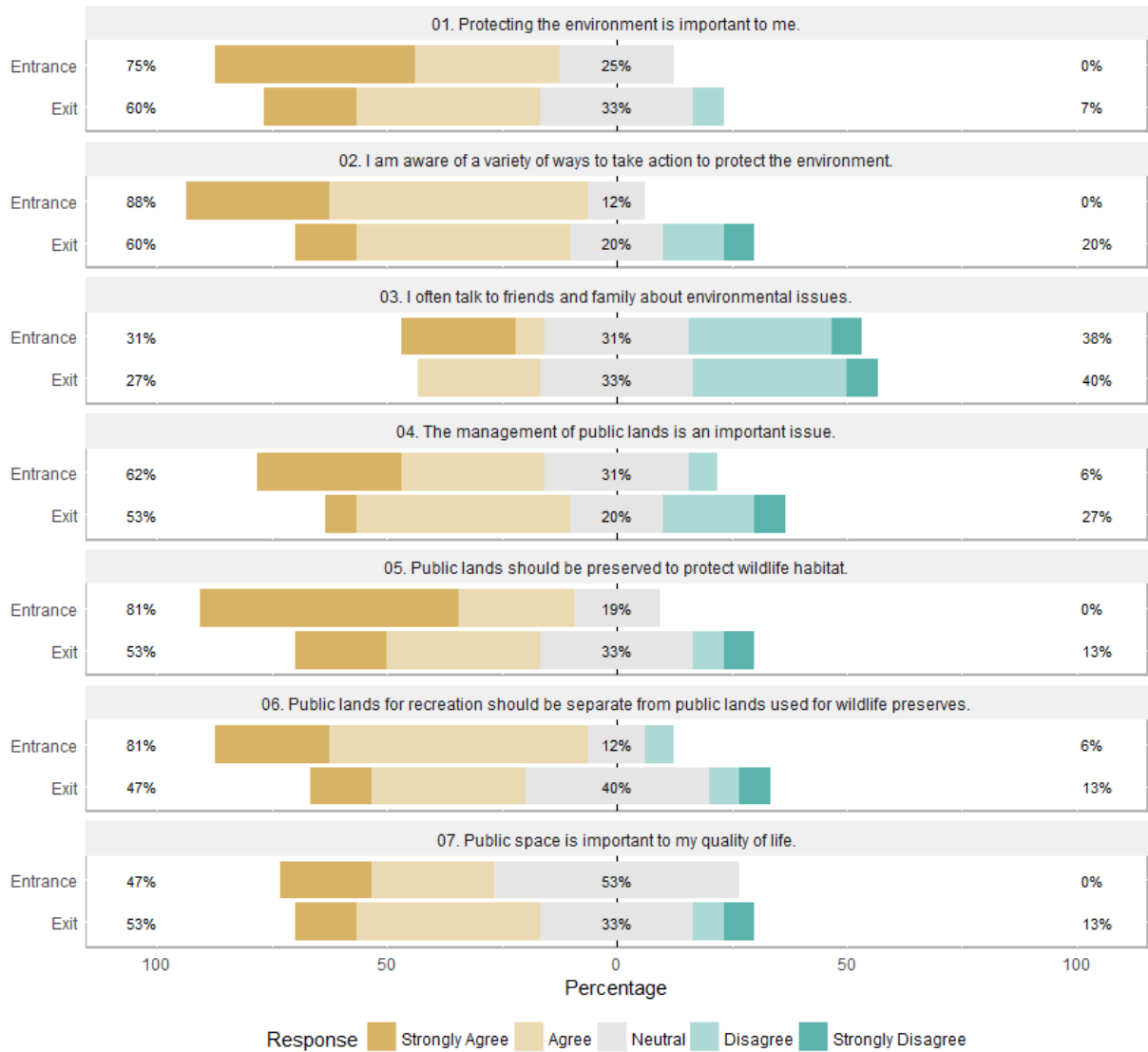


Figure 4.9: Corpsmember Entrance and Exit Survey: Environment (questions 15.1- 15.7)

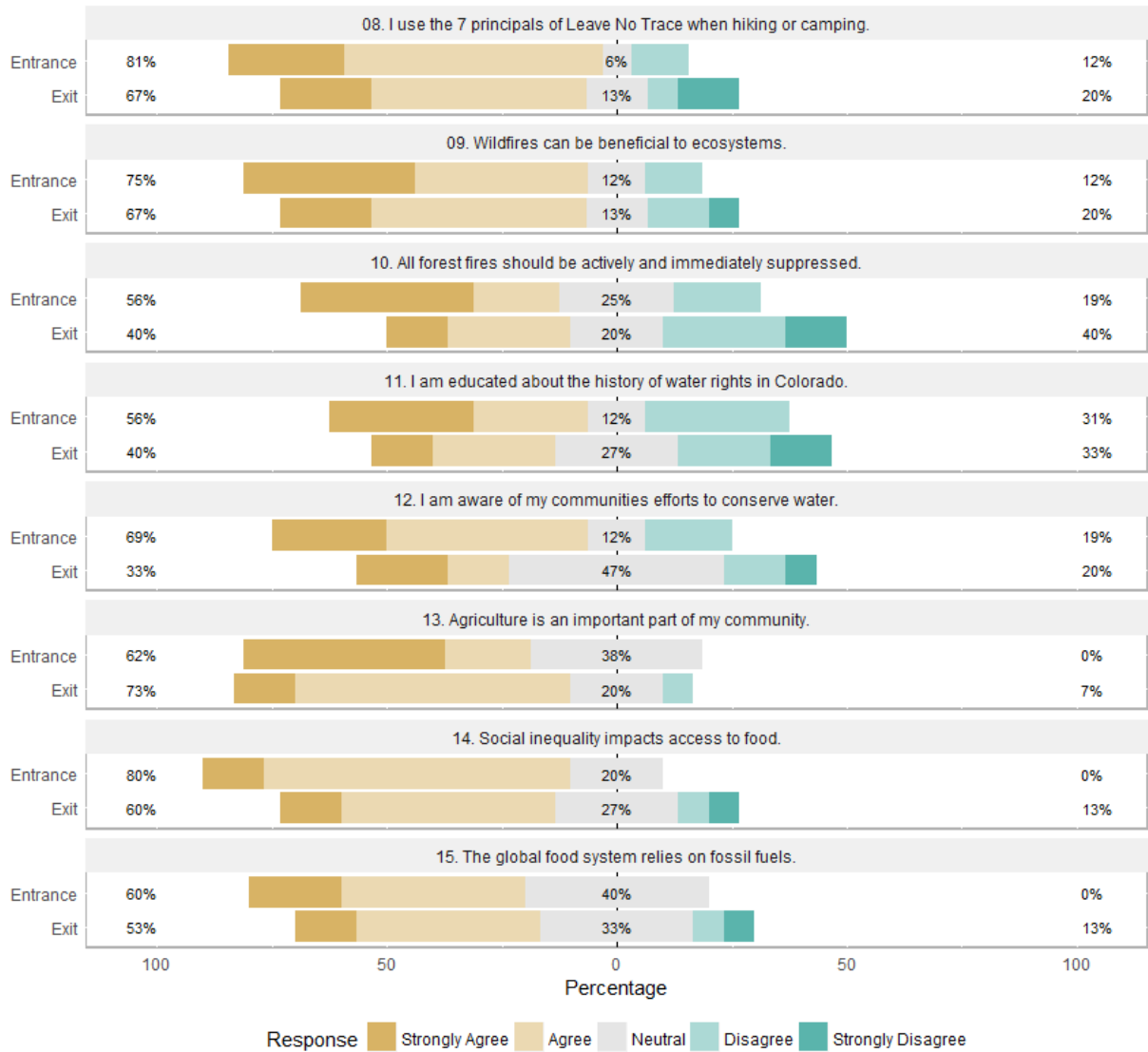


Figure 4.10: Corpsmember Entrance and Exit Survey: Environment (questions 15.8-15.15)

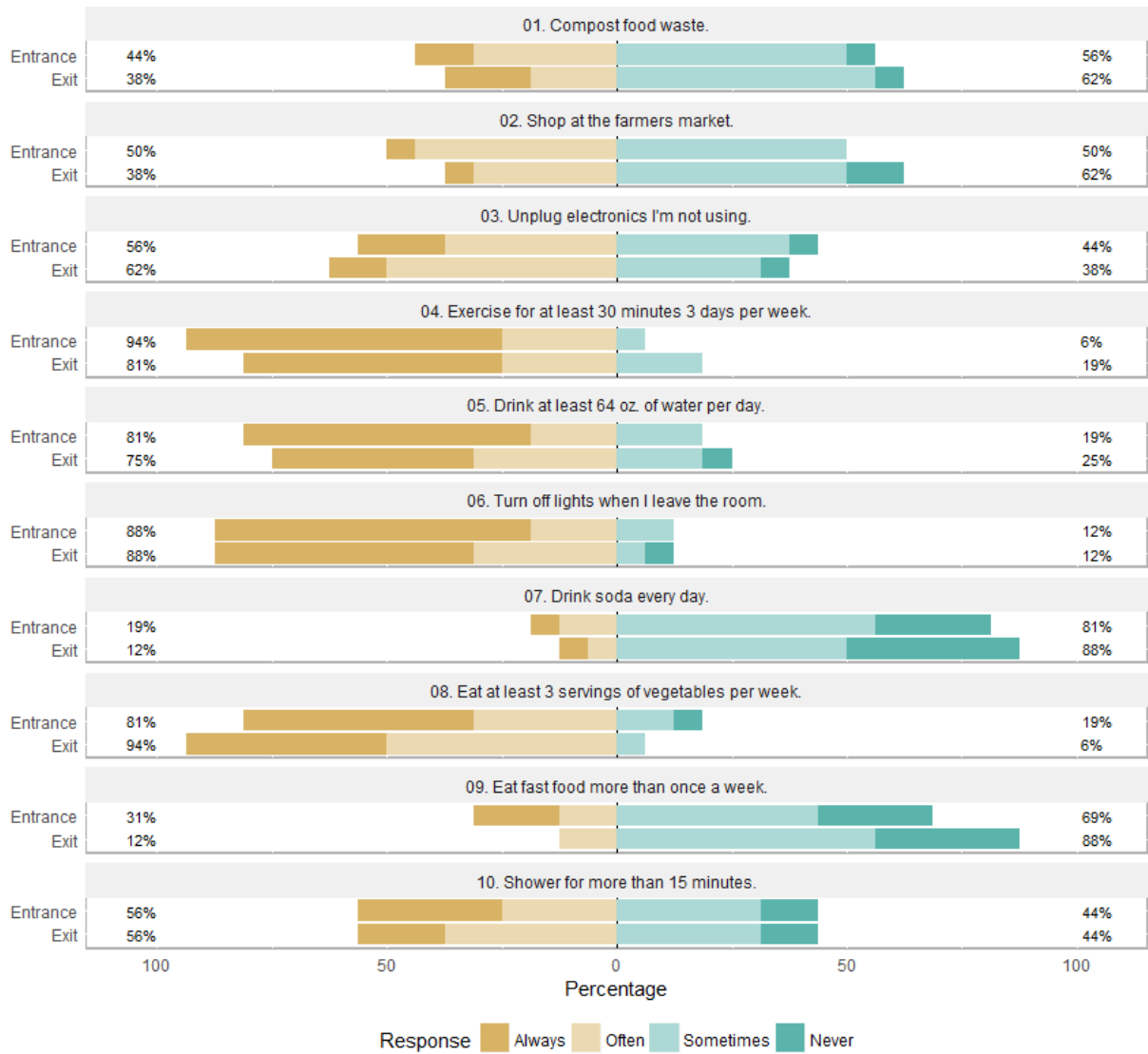
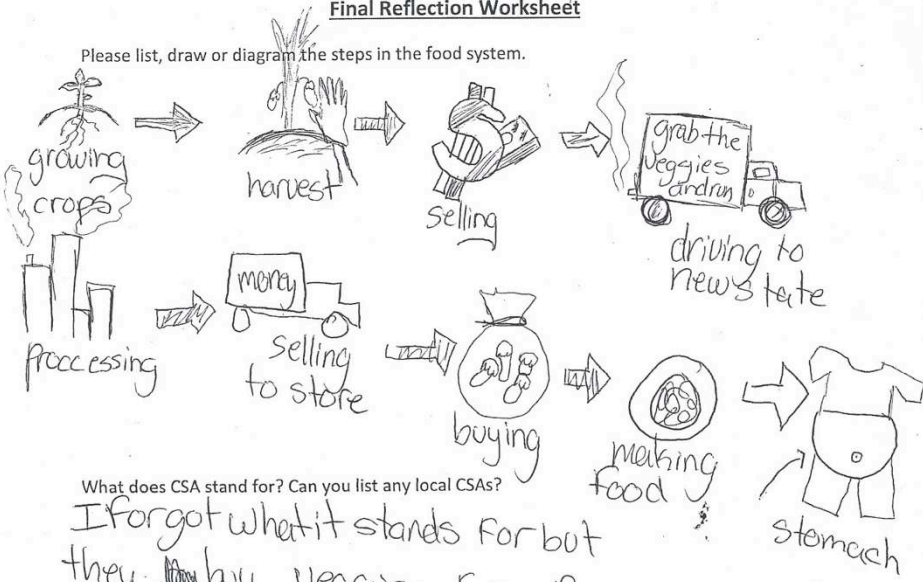


Figure 4.11 *Corpsmember Entrance and Exit Survey Responses: Behaviors*

Final Reflection Worksheet

Please list, draw or diagram the steps in the food system.

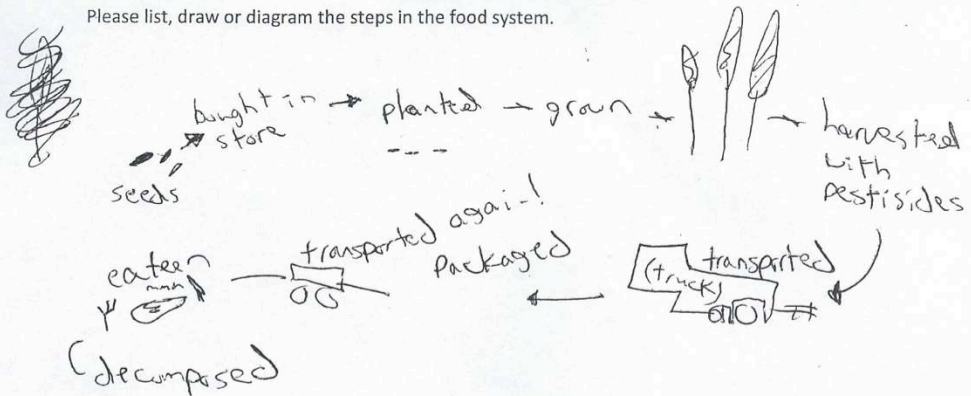


What does CSA stand for? Can you list any local CSAs?

I forgot what it stands for but they buy veggies from farms.

Final Reflection Worksheet

Please list, draw or diagram the steps in the food system.



Final Reflection Worksheet

Please list, draw or diagram the steps in the food system.

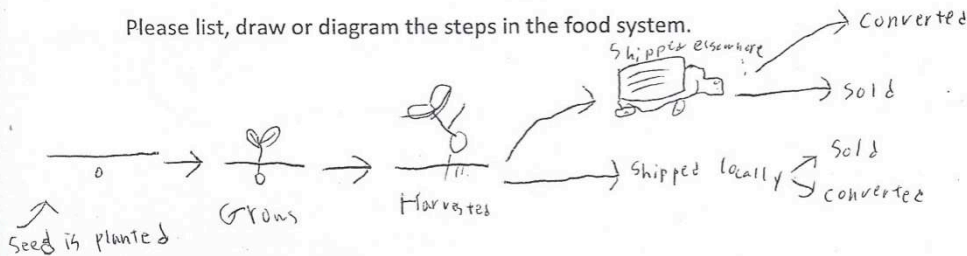


Figure 4.12: Final Reflection: List, draw or diagram the steps in the food system

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Appendix A: Farm Partner Interview Guide

- Tell me a little about your farm
 - What do you grow, who do you sell to, how long have you been farming
 - What did you do before you started farming?
 - What is your educational background?
- Tell me about your relationship with the AgriCorps
 - What do you enjoy about having the AgriCorps come to your farm?
- What do you know about the learning goals of the AgriCorps program?
 - How does the LCCC staff communicate this to you?
 - How are you held accountable by the LCCC staff?
- How do you inform crew members about your contribution to alienating hunger in Larimer county?
- What do you do to facilitate learning on your farm?
 - Talks in the field? Specific projects for the AgriCorps?
- Why is it important for young people to work on farms?
 - What skills/knowledge are they learning?
- What do you think corpsmembers learn about the agricultural system from participating in AgriCorps?
- Do you work with any other youth groups in town?
 - How does the AgriCorps program differ from these programs?

Appendix B: Coding Schema (Corpsmember Documents)

The image displays three screenshots of a coding schema interface, each showing a list of codes under the heading 'Codes'. The codes are organized into hierarchical groups, with some groups expanded (indicated by a green plus sign) and others collapsed (indicated by a red minus sign). The codes are represented by colored circles: green for expanded groups, red for collapsed groups, and blue for individual codes. The interface includes standard window controls at the top of each panel.

Panel 1 (Left):

- personal development (collapsed)
 - interest in gardening/farming
 - social responsibility
 - socialization
- healthy lifestyles (expanded)
- soft skills (collapsed)
 - problem solving
 - time management
 - respect
 - teamwork
 - responsibility
 - communication
 - teamwork
 - following direction
 - leadership
 - work ethic
- professional development (collapsed)
 - resume
 - interview
 - work experience
 - application
- Knowledge (collapsed)
 - general environment (expanded)
 - basic gardening skills (expanded)
 - food system (expanded)
 - nothing
 - community
 - environmentalism
 - sustainability
 - farm type (expanded)
- program (collapsed)
 - over emphasize food donations
- program recommendaiton (expanded)
- evaluation (expanded)
- Questions (expanded)
- Day in the life (expanded)
- Favorite: activity (expanded)
- Favorite: farm (expanded)
- Recommend to others? (expanded)

Panel 2 (Middle):

- application
- Knowledge (collapsed)
 - general environment (collapsed)
 - pesticide
 - native plants
 - basic gardening skills (collapsed)
 - plant identification
 - planting
 - harvesting
 - weeding
 - farming
 - weeding
 - organic
 - compost
 - plant identification
 - food system (collapsed)
 - seed to plant
 - food miles
 - food chain
 - food pyramid
 - illustration
 - farm to table
 - nothing
 - community
 - environmentalism
 - sustainability
 - farm type (collapsed)
 - shop at farmers market
 - definition close
 - definition correct
 - identify more than 1 correct farm
 - identify 1 correct farm
 - mis identify farm
 - definition incorrect

Panel 3 (Right):

- Knowledge (expanded)
- personal development (expanded)
- professional development (expanded)
- program (collapsed)
 - Day in the life (collapsed)
 - learning
 - routine
 - weeding
 - evaluation (collapsed)
 - informative
 - raise awareness
 - Favorite: activity (collapsed)
 - bees
 - community
 - farmer talk
 - food system
 - resume
 - team building activities
 - Favorite: farm (collapsed)
 - gardens on spring creek
 - mulberry
 - revive
 - over emphasize food donations
 - program recommendaiton (collapsed)
 - 5 day work week
 - enforce punctuality
 - less paperwork
 - less weeding
 - music usage
 - no HHF
 - uniform
 - Questions (expanded)
 - Recommend to others? (collapsed)
 - educational

Appendix C: Coding Schema (Farm Partner Interviews)

Farm partner interviews were coded for the following six themes:

- Farm philosophy
- Expectation for corpsmembers learning and work ethic
- Introduction to the AgriCorps
- Teaching in the field
- Program recommendations
- Best practices



Corpsmember Exit Survey

Summer 2014

*8-digit Corpsmember ID (crew code + 6-digit date of birth): _____

Please answer **all** questions **thoughtfully and honestly**. The results of this survey will be used to better understand how to serve future LCCC program participants. We respect and value your opinions as your input is an important part of our program evaluation process.

If you have any questions about the content of this survey or the how the questions will be used, please contact Development Associate Rachael Bahre at: (970) 498-6629.

*All survey data will be stored using your Corpsmember ID. No names will be attached to survey results.

1. How did you hear about the position with the LCCC? _____

2. Are you a full time student? **Yes** **No**

a. What is your current grade level? _____

b. What school will you attend? _____

c. Major (if applicable) _____

3. Are you a recipient of free and reduced lunch or federal Pell grants? **Yes**
No

4. What is highest level of education you hope to achieve?

a. General Education Degree (G.E.D./ High School Equivalent Exam)

b. High School Diploma

c. Completion of apprenticeship or professional training

d. Associates Degree

e. Bachelors degree

f. Graduate school

5. What is your dream job? _____

6. Are you interested in pursuing a career in Natural Resources? **Yes** **No**

7. Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel confident in my ability to write a resume					
2. I am able to complete a job interview in a professional manner					
3. I know how to properly fill out a job application					
4. I feel confident in my ability to search for job opportunities					
5. I feel confident about my ability to obtain a job in the future					

8. How can the LCCC help you feel more prepared to secure jobs in the future?

9. Are you involved with any extracurricular activities in school? **Yes** **No**

a. In what activities? _____

b. For how many hours per month? _____

10. Do you regularly volunteer with an organization in the community? **Yes**
No

a. With what organizations? _____

b. For approximately how many hours per month? _____

11. Have you volunteered at short term events in the community? **Yes** **No**

a. With what organizations? _____

b. For approximately how many hours? _____

12. Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1. I take an interest in what's happening in my community					
2. Young people have a lot to contribute to their community					
3. Volunteer work is very important to me					
4. Young people can influence community decisions					

13. Indicate whether you frequently participate in the following activities:

	Always	Often	Some-times	Never
1. Compost food waste				
2. Shop at the farmers market				
3. Unplug electronics I'm not using				
4. Exercise for at least 30 minutes 3 days per week				
5. Drink at least 64 oz. of water per day				
6. Turn off lights when I leave the room				
7. Drink soda every day				
8. Eat vegetables when they are on my plate				
9. Eat fast food more than once a week				
10. Shower for more than 15 minutes				

14. Please list the top four outdoor activities you participate in and time you spend engaged in each activity:

	Approximate hours per month
Example: Biking to a from school (1 hour a day 5 days a week)	20
Example: Walking on the Poudre Trail (<i>1 hour, 6 times a week</i>)	16
1.	
2.	
3.	
4.	

15. Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1. Protecting the environment is important to me					
2. I am aware of a variety of ways to take action to protect the environment					
3. I often talk to friends and family about environmental issues					
4. The management of public lands is an important issue					
5. Public lands should be preserved to protect wildlife habitat					
6. Public lands for recreation should be separate from public lands used for wildlife preserves					
7. Public space is important to my quality of life					
8. I use the 7 principals of Leave No Trace when hiking or camping					
9. Wildfires can be beneficial to ecosystems					
10. All forest fires should be actively and immediately suppressed					
11. I am educated about the history of water rights in Colorado					
12. I am aware of my communities efforts to conserve water					
13. Agriculture is an important part of my community					
14. Social inequality impacts access to food					
15. The global food system relies on fossil fuels					

16. Please indicate your level of agreement with the following statements: ⁹

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with my corps experience					
I would recommend this corps to others					
The service that we preformed in the community was helpful to others					

17. I will use my AmeriCorps education award to:

- a. Attend a two year college program (if yes, where? _____)
- b. Attend a four year college or university program (if yes, where? _____)
- c. I am not sure yet
- d. I did not earn an education award

⁹ Questions 1-15 on the exit survey were identical to questions 1-15 on the entrance survey. Questions 16-17 were only included in the exit survey.

Appendix E: Corpsmember Evaluations



Corpsmember Performance Evaluation

Corpsmember Name: _____ Crew: _____

Pre-Evaluation: Goals (To be completed by Corpsmember at beginning of season)

Please set 3-5 goals for yourself for the season. These goals may be personal or professional goals, including but not limited to career exploration, leadership and teamwork development, personal growth, etc. Please be specific! You will revisit these goals during your mid-term and end of term evaluations.

Mid-Term: Goals (To be completed by Corpsmember mid-term)

The goal of this form is to allow the Corpsmember to record and reflect on job performance, to allow for growth, learning, and professional development. Please discuss your performance this season and how you are working towards achieving your goals.

Corpsmember Performance Evaluation
(To be completed by Corpsmember mid-term)

Rate yourself in the following areas:

Leadership	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Able to appropriately assume leadership roles				
Communicates opinions when necessary, appropriately and respectfully				
Takes initiative and makes appropriate decisions in problem solving and work tasks				
Personal Growth	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Can set and achieve realistic personal and professional goals				
Accepts feedback/constructive criticism and incorporates into daily activity				
Willing to learn new skills/take on new challenges				
Accepts responsibility for actions				
Professionalism/Represents LCCC Positively	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Wears uniform appropriately				
Follows all agency policies and procedures				
Communicates respectfully and with appropriate language in all settings				
Safety Practices	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Demonstrates LCCC vehicle safety: wears seatbelt, follows traffic laws and adheres to LCCC vehicle policies and procedures at all times. Reports any abuse of policy to supervisor immediately				
Uses PPE when appropriate, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay)				
Follows guidelines for proper tool use and maintenance				
Teamwork and Work Ethic	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Motivated to complete all assigned tasks in a timely manner, uses good time management skills				
Able to work well with others, respects others, and appropriately addresses conflict				
Participates in all activities and maintains a positive attitude				
Accepting of supervisor direction and instruction				

Comments:

Corpsmember Performance Evaluation
(To be completed by LCCC staff mid-term)

Rate the Corpsmember in the following areas:

Leadership	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Able to appropriately assume leadership roles				
Communicates opinions when necessary, appropriately and respectfully				
Takes initiative in problem solving and work tasks				
Leads by example				
Personal Growth	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Can set and achieve realistic personal goals (can set and achieve goals to challenge self in personal and professional development)				
Accepts feedback/constructive criticism and incorporates into daily activity				
Willing to learn new skills/take on new challenges				
Able to identify strengths and weaknesses/self-evaluate				
Accepts responsibility for actions				
Professionalism/Represents LCCC Positively	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Wears uniform appropriately				
Follows all agency policies and procedures				
Communicates respectfully and with appropriate language in all settings				
Shows respect for LCCC, community and all project sites				
Safety Practices	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Demonstrates LCCC vehicle safety: wears seatbelt, follows traffic laws and adheres to LCCC vehicle policies and procedures at all times. Reports any abuse of policy to supervisor immediately				
Maintains company property including, vehicle and building interiors. Disposes of trash and recycling in designates areas. Supports the overall LCCC community in "house" cleaning tasks as needed				
Uses PPE when appropriate and follows best practices for usage as demonstrated by LCCC staff				
Follows guidelines for proper tool use and maintenance a) follows check-in/check-out procedures, b) ensures tools are tracked at all time in possession, and c) does not lose any tools				
Follows all general safety guidelines: participates in safety meetings and trainings, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay)				

Teamwork and Work Ethic	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Completes all assigned tasks in a timely manner, uses good time management skills				
Contributes to team efforts				
Independently begins and carries out tasks				
Asks questions to ensure that instructions are understood, demonstrates follow through				
Completes quality work, is detail-oriented and thorough, finished product positively represents LCCC				
Able to work well with others and appropriately addresses conflict				
Is patient and communicates appropriately with team members				
Maintains a positive attitude				
Arrives on time, returns from breaks on time and works hard to complete tasks throughout the day				
Accepting of supervisor direction and instruction				

Comments:

Please describe the Corpsmember's greatest strengths: _____

Please describe the areas in which the Corpsmember can continue to grow/work on: _____

Corpsmember Signature: _____ **Date:** _____

Crew Leader Signature: _____ **Date:** _____

Project Coordinator/Manager Signature: _____ **Date:** _____

Corpsmember Performance Evaluation
(To be completed by Corpsmember at the end of the term)

The goal of this form is to allow the Staff and Corpsmember to record and reflect on job performance, to allow for growth, learning, and professional development.

Please describe how you've grown and the skills you've gained this season that will benefit you in the future:

How did you work to achieve your goals and were you successful?

Reflect on the season and your overall performance:

Corpsmember Performance Evaluation
 (To be completed by Corpsmember at the end of the term)

Rate yourself in the following areas:

Leadership	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Able to appropriately assume leadership roles				
Communicates opinions when necessary, appropriately and respectfully				
Takes initiative and makes appropriate decisions in problem solving and work tasks				
Personal Growth	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Can set and achieve realistic personal and professional goals				
Accepts feedback/constructive criticism and incorporates into daily activity				
Willing to learn new skills/take on new challenges				
Accepts responsibility for actions				
Professionalism/Represents LCCC Positively	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Wears uniform appropriately				
Follows all agency policies and procedures				
Communicates respectfully and with appropriate language in all settings				
Safety Practices	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Demonstrates LCCC vehicle safety: wears seatbelt, follows traffic laws and adheres to LCCC vehicle policies and procedures at all times. Reports any abuse of policy to supervisor immediately				
Uses PPE when appropriate, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay)				
Follows guidelines for proper tool use and maintenance				
Teamwork and Work Ethic	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Motivated to complete all assigned tasks in a timely manner, uses good time management skills				
Able to work well with others, respects others, and appropriately addresses conflict				
Participates in all activities and maintains a positive attitude				
Accepting of supervisor direction and instruction				

Comments:

Corpsmember Performance Evaluation
(To be completed by LCCC staff at the end of the term)

Rate the Corpsmember in the following areas:

Leadership	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Able to appropriately assume leadership roles				
Communicates opinions when necessary, appropriately and respectfully				
Takes initiative in problem solving and work tasks				
Leads by example				
Personal Growth	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Can set and achieve realistic personal goals (can set and achieve goals to challenge self in personal and professional development)				
Accepts feedback/constructive criticism and incorporates into daily activity				
Willing to learn new skills/take on new challenges				
Able to identify strengths and weaknesses/self-evaluate				
Accepts responsibility for actions				
Professionalism/Represents LCCC Positively	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Wears uniform appropriately				
Follows all agency policies and procedures				
Communicates respectfully and with appropriate language in all settings				
Shows respect for LCCC, community and all project sites				
Safety Practices	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Demonstrates LCCC vehicle safety: wears seatbelt, follows traffic laws and adheres to LCCC vehicle policies and procedures at all times. Reports any abuse of policy to supervisor immediately				
Maintains company property including, vehicle and building interiors. Disposes of trash and recycling in designates areas. Supports the overall LCCC community in "house" cleaning tasks as needed				
Uses PPE when appropriate and follows best practices for usage as demonstrated by LCCC staff				
Follows guidelines for proper tool use and maintenance a) follows check-in/check-out procedures, b) ensures tools are tracked at all time in possession, and c) does not lose any tools				
Follows all general safety guidelines: participates in safety meetings and trainings, obeys all site-specific safety rules, acts in a professional manner at all times (no reckless behavior or horseplay)				

Teamwork and Work Ethic	Exceeds Expectations	Meets Expectations	Requires Improvement	Unacceptable
Completes all assigned tasks in a timely manner, uses good time management skills				
Contributes to team efforts				
Independently begins and carries out tasks				
Asks questions to ensure that instructions are understood, demonstrates follow through				
Completes quality work, is detail-oriented and thorough, finished product positively represents LCCC				
Able to work well with others and appropriately addresses conflict				
Is patient and communicates appropriately with team members				
Maintains a positive attitude				
Arrives on time, returns from breaks on time and works hard to complete tasks throughout the day				
Accepting of supervisor direction and instruction				

Comments:

Please describe the Corpsmember's greatest strengths: _____

Please describe the areas in which the Corpsmember can continue to grow/work on: _____

Corpsmember Signature: _____ **Date:** _____

Crew Leader Signature: _____ **Date:** _____

Project Coordinator/Manager Signature: _____ **Date:** _____

Appendix F: Reflection Worksheets

Orientation Reflection Worksheet

Your Corps ID number (8 digit date of birth): _____

Date:

Location:

Time:

Please reflect upon on your expectations for the AgriCorps Program

What do you hope to learn during your term in AgriCorps?

About food and agriculture?

About yourself?

About working with others?

About how to get a job?

About service in your community?

Please describe what you think a day in the life of an AgriCorps crew member will look like?

Orientation Reflection Worksheet

Please list, draw or diagram the steps in the food system.

What does CSA stand for? Can you list any local CSAs?

What is a community garden? Can you list any local CSAs?

Do you shop at the farmers market? Can you list any farmers that sell at the farmers market?

Project Reflection Worksheet

Your Corps ID number (8 digit date of birth): _ _ _ _ _ _ _ _

Date:

Farm:

Time:

Please reflect upon on your experience in the field today

Briefly describe what you did at the farm today? Include both farm projects and group activities.

What did you learn new at this farm?

About food and agriculture?

About yourself?

About working with others?

About service in your community?

How will you use what you learned?

In your day to day activities?

When applying for a job?

Activity Reflection Worksheet

Your Corps ID number (8 digit date of birth): _ _ _ _ _ _ _ _

Name of Activity/Tour:

Name of Facilitator:

Date:

Location:

Time:

Please reflect upon on today's activity

Describe the activity:

In one word:

In a few sentences:

What did you learn?

About: (agriculture, hunger, community, etc.)

About: (yourself)

How does this relate to the work we do on the farms?

How can you apply this activity to every day life?

Should we repeat this activity next year? Why or why not?

Photo Reflection Worksheet

Your Corps ID number (8 digit date of birth): _ _ _ _ _ _ _ _

Date photo was taken:

Location where photo was taken:

Please reflect upon on why you took this photo

Describe what's going on in this photo:

In one word:

In a few sentences:

What does this photo illustrate about your corps experience?

About food and agriculture?

About service in your community?

About your personal and professional growth?

Is there anything else you want people to know about your corps experience?

Final Reflection Worksheet

Your Corps ID number (8 digit date of birth): _ _ _ _ _ _ _ _

Date:

Farm:

Time:

Please summarize your experience in the AgriCorps Program

What did you learn during your term in AgriCorps that surprised you?

About food and agriculture?

About yourself?

About working with others?

About service in your community?

How will you use what you learned in AgriCorps?

In your day to day activities?

When applying for a job?

Describe a day in the life of an AgriCorps crew member?

Final Reflection Worksheet

Please list, draw or diagram the steps in the food system.

What does CSA stand for? Can you list any local CSAs?

What is a community garden? Can you list any local CSAs?

Do you shop at the farmers market? Can you list any farmers that sell at the farmers market?

Final Reflection Worksheet

Would you recommend the AgriCorps program to others in the community? Why or why not?

What was your favorite educational activity? Why?

What was your favorite farm? Why?

If you could change one thing about this program, what would it be?

Appendix G: Goals with Revised Objectives

Keep the language specific to the personal and professional development that is occurring through the program. Assess how many participants complete the resume writing workshop (measurable) not the number that have a tangible record of service (can be assumed, but not measured by participation in the workshop alone). Track growth in categories already being measured on the corpsmembers evaluations. Perhaps break this down into percentage change you would like to see in each category. For example, if you do not expect 75% of corpsmembers to assume leadership roles, perhaps keep growth in the leadership category smaller, or if you expect 100% of corpsmember to meet expectations for adherence to safety protocol, then state those separate. Given the crew leaders tendency to mark half scores in between meets and exceeds expectations, I would also recommend widening the evaluation scale to include more categories. Growth in categories on the evaluation can be figured by subtracting the score at the mid-season evaluation from the final evaluation on a given question for each participant, and recording the number of responses greater the 0 for percent increased, the number of zeros for no change, and numbers less than 0 for negative change.

Goal One: To promote self-sufficiency in youth and young adults through skill development for personal and professional growth.

- *Objective 1a: 80% of corpsmembers complete resume writing workshop and leave program with a resume. Post service, 80% of corpsmembers leave prepared to speak about their service and have a tangible record (resume) of their term*
- *Objective 1b: 75% of corpsmembers show growth in leadership skill, personal growth, professionalism, adherence to safety protocol, and teamwork and work ethic. By the end of their term, 75% of corpsmembers show growth in transferable personal and professional skills**

Establish one or two core themes for the program and have crew leaders and farm partners focus their structured and informal education around these themes. Ask a question related to this in an entrance survey, and again in the exit survey, and record change in response. It is impossible to measure change on broad topics such as interest in environment and/or community, especially with a program with a short duration.

Goal Two: To increase participant's knowledge and awareness of community and environmental issues through education and service learning.

- *Objective 2a: By service completion 70% participants will leave the program able to diagram how food gets from farm to table, 70% of corpsmembers show an increased interest in environment and/or community*
- *Objective 2b: 70% of participants can define food dessert Throughout the summer, expose 16 youth to the local farm community by way of various service projects**

Since the goal is about conservation projects, not participants, make your objective about hours serving urban farmland. Objectives for this goal should relate to data collected in the project log, so either tailor the project log to collect data about duration engaged in each activity, or change the objective to be

about weights and row feet so they correlate. Another measure of success towards this goal may be acres of farmland preserved, a number that could be gathered from farm partners.

Goal Three: To complete meaningful and long lasting conservation projects in Northern Colorado that benefits our environment and community.

- *Objective 3a: Complete 200 hours of service at eight urban farms. ~~By the end of their service term, each corpsmember will complete 80 hours of service on local farms/gardens*~~*
- *Objective 3b: To assist with the weeding, harvesting, and general maintenance of _____ acres of urban farm land.*