AN EVALUATION OF A YOUTH CAMP PROGRAM’S IMPACT ON PARENTS’
PERCEPTIONS OF SUSTAINABILITY AND FAMILY ENGAGEMENT

by

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(Under the Direction of JESSICA HOLT)

ABSTRACT

Summer camp programs designed around community gardens are an excellent way of educating youth and adolescents on better health, nutrition, agriculture, and the importance of local food systems; yet, it is the parents of those youth that are making most of the nutritional, extracurricular, and household management decisions for the family. Engagement of adults with their children on issues related to nutrition, agriculture, the environment, sustainability, and local food was studied after a two-week garden summer camp program for youth. A sustainable living curriculum was designed and delivered throughout the camp program as a scrapbook that could be shared with parents following the end of the program. The scrapbooks were used as a tool by which a curriculum could be shared between youth and adults. A qualitative approach was utilized in evaluating the values of adults concerning sustainability and family engagement on learning.

INDEX WORDS: Garden camp program, Parental involvement, Sustainable living curriculum, Family engagement, Camp counselors
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DEDICATION

I dedicate this thesis to my loving husband, Edwin, who supported me with every step, and without whom, I could not have dedicated the time and attention this research required. Te amo, mi vida.
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I want to first and foremost thank the Lord, Jesus Christ. My faith in Him is the guiding light in every decision I make.

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CHAPTER 1

INTRODUCTION

Background

Youth and adults learn differently. Research on the differences between the way youth and adults learn has suggested that several key characteristics exist between the two groups that should be taken into consideration in designing and implementing effective educational resources and programs (Holmes & Abington-Cooper, 2000; Knowles, 1973; Yonge, 1985). Although youth and adults may learn differently, some suggest partnering the two through positive youth/adult partnerships (Y/APs) may help with long-term program goals. Bridging the gap between adults and youth may be an important and beneficial practice for organizations who seek to create sustainable attitude, knowledge, and behavior changes now and for future generations (Camino, 2000). Research has shown many positive outcomes from building youth and adult partnerships, and collaboration among these groups should be a primary focus for camps and organizations who wish to have an impact on agriculture and the environment (Camino, 2000). Some organizations, such as the National 4-H, address building these relationships by promoting volunteer experiences for adults during youth educational programs and retreats; thereby, providing the same educational opportunities to adults while building youth and adult partnerships (Lesmeister, Green, Derby, & Bothum, 2012). Education is an integral part of changing behaviors in an effort to address pressing agricultural and natural resource concerns (Stern, 2000a), and organizations are
increasingly seeking to understand the most effective strategies for creating these behavior changes (Monroe, 2003). Many researchers believe benefits to learning and development can be improved by considering and incorporating a conducive learning environment for which the learning will take place (Bandura, 1986; Kolb, 1984; Roberts, 2006; Schunk, 2012).

Community gardens provide unique benefits to communities, and numerous studies support the claim that there is a strong socio-ecological value in community gardening, particularly for low-income, vulnerable populations, such as being a fresh source of locally grown produce, serving as a green space for community members to enjoy, and providing an excellent opportunity for teaching and learning about agriculture and the environment (Lovell, Husk, Bethel, & Garside, 2014; Twiss, Dickinson, Duma, Kleinman, Paulsen, & Rilveria, 2003). Moreover, community gardens have been found to provide occasions for community members to socially connect, instill deeper values for shared space, and foster community well-being. (American Community Gardening Association [ACGA], 2014; Coorigan, 2011; Harris, 2014). Community gardens have been shown to be an excellent way of educating youth and adolescents on better health, nutrition, agriculture, and the importance of local food systems (ACGA, 2014); yet, parents of those youth make most of the nutritional, extracurricular, and household management decisions for the family. Engagement of adults with their children on issues related to nutrition, agriculture, the environment, sustainability, and local food is an important part of creating and sustaining healthy attitudes and behaviors (Camino, 2000). There is little information available in the literature regarding particular methods of engaging families through learning with children. This case study examined one potential
method of engaging family learning by creating and strengthening the experiential learning activities at the youth camp and subsequently providing the campers with scrapbooks of their experiences to be shared with their families. The findings of this research are valuable for education practitioners and youth camp program design.

**Chattahoochee Nature Center**

The Chattahoochee Nature Center (CNC) is located in Roswell, Georgia, a suburb of Atlanta. The Nature Center is situated alongside the Chattahoochee River, a rich natural resource providing habitat to a variety of aquatic and wildlife species as well as several threatened and endangered plant species. The Chattahoochee River also supports a wide array of community benefits, being a significant source of Georgia’s drinking water, offering several recreational uses, and is a major source for hydroelectric power in Georgia (Georgia River Network, 2015). The Nature Center offers a variety of educational programs for educators, home school groups, and community groups of all ages in an effort to provide lifelong learning opportunities. CNC also hosts year-round camp and after-school programs centered on their mission of connecting people with nature. The Nature Center’s goal for youth is “to foster an active awareness and understanding of the ecology of the natural world through interactive, hands-on learning experiences” (Chattahoochee Nature Center, 2015). The level of commitment of CNC to youth development and learning is also deeply invested in the value of providing educational opportunities for adults to learn and grow as well, stating their goal is “to provide a local place for adult learning experiences, volunteerism, and outdoor family activities that strengthens the environmental stewardship commitment within the community” (Chattahoochee Nature Center, 2015).
The Unity Garden

In pursuit of providing hands-on learning experiences in gardening, and to support healthier lifestyles, The CNC, with financial support from Kaiser Permanente, implemented a quarter-acre vegetable garden in 2010 (personal communication, Chris Nelson, 2015). Over 90% of the produce from the Unity Garden is donated to local charities, further demonstrating the commitment CNC has for supporting healthy, vibrant communities (C. Nelson, personal communication, April 17, 2015). Native plant species are grown throughout the garden to provide forage and habitat for pollinators, and are donated to community members to help build understanding of the importance that pollinators play in community and ecosystem health. The Unity Garden is operated year-round utilizing sustainable agricultural practices, and hosts educational workshops for youth and adults to help foster a deeper understanding of where food comes from, teach ways of improving health, and promote sustainable agricultural practices.

GROW Camp

In 2014 the CNC started a youth summer camp program situated in the Unity Garden to provide experiential learning opportunities to youth regarding sustainable agriculture. The GROW Camp program was designed to implement educational opportunities and hands-on experiences with gardening, harvesting, and composting, as well as opportunities to feed chickens and learn about ways of attracting pollinators (C. Nelson, personal communication, April 17, 2015). While the benefits of such a program are assumed, evaluations of such were requested from CNC to gain a better understanding of how to best implement programs that will positively impact the community (C. Nelson, personal communication, April 17, 2015).
Statement of the Problem and Need for this Study

Understanding the way people regard natural resources and the value they place on living in a way that is sustainable for future generations is an important piece in designing educational programs that will have the greatest impact (Stern, 2000a). Evaluating how people regard agriculture and the environment is an important process in building and sustaining healthy communities and is the first step in addressing the increasing national and global food security and natural resources issues (Stern, 2000a). An inevitable truth has emerged as the national and global population sizes continue to grow, putting more strain on natural resources, and has pushed food security to the forefront of regional planning and food systems debates (Timmer, 2012; USCB, 2012). Regional planning policies have become more focused on sustainable agricultural practices and building local industries (Hellegers, Silberman, Steduto, & McCormick, 2008). Engaging community members in becoming more aware of agricultural and environmental issues is an important piece in creating behavior changes in hopes of developing more sustainable communities now and in the future (Camino, 2000; Stern, 2000b). With increasing issues of available national and global food supplies, diminishing natural resources, and an ever-growing human population (Pimentel, Huang, Codova, & Pimentel, 1997; Shuttleworth, 2015) there is a need for immediate action regarding sustainability. Many researchers agree that education plays a major role in promoting sustainability and raising awareness of such dire issues (Shuttleworth, 2015; UNESCO, 2005). The United Nation’s Educational, Scientific, and Cultural Organization (UNESCO) argues that education is “the great hope for creating a more sustainable
future” (2005, p. 11), and outlined the purpose for this kind of action-oriented education in their sustainable development priorities as follows:

Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way. (UNESCO, 2005, p.11)

Finally, according to priority four of the American Association for Agricultural Education’s National Research Agenda, “learners in all agricultural education learning environments will be actively and emotionally engaged in learning, leading to high levels of achievement, life and career readiness, and professional success” (Doerfert, 2011, p.9).

Therefore, agricultural and environmental educators need to thoroughly understand the values adults have for agriculture, the environment, and more importantly, for sustainability and how those values are shared within family settings and can be promoted through collaborative learning opportunities.

**Purpose of the Study and Research Objectives**

The purpose of this study was to observe methods of family engagement and learning among adults and their children, who attended a summer camp program based on gardening. Another purpose of this study was to observe methods of engagement and learning between the counselors of the summer camp program and the children attending
the camp. The camp counselors utilized a curriculum designed around sustainable living, which included good health and nutrition, sustainable agricultural practices, support of local food, environmental issues, and community involvement. Part of the sustainable living curriculum included the creation of individual scrapbooks, for which each of the campers crafted daily entries for their personal scrapbooks based on the lessons they learned in camp each day. The implementation of the scrapbooks, as part of the sustainable living curriculum, combined elements of experiential learning with environmental and agricultural sciences to provide campers with rich learning experiences while at camp and to promote the transfer of the educational material home to the parents of campers through their personal scrapbooks.

The participants of this exploratory case study were camp counselors and parents of children enrolled in the summer camp program at the CNC. The first piece of this study was to examine the role the camp counselors played in the learning process during the camp program. The second piece of this study was to understand how a scrapbook curriculum was utilized in the learning process. Another piece to this study was to describe how parents defined sustainability and what values they placed on living sustainably in their personal and familial lives. The last major piece of this study was to identify ways family engagement was achieved through an educational youth camp experience of children enrolled in a two-week program.

The research objectives that guided this study were:

1) Describe how the counselors of the camp influenced the learning and engagement of campers related to the sustainable living curriculum throughout the camp program.
2) Describe how the sustainable living scrapbook was utilized in the learning process at camp.

3) Examine how adult audiences were reached through an educational youth camp program regarding sustainability attended by their children.

4) Identify the values parents of this study have for family engagement and learning with regard to their children’s educational camp experiences.

**Significance of the Study**

The implications of encouraging more family’s to be engaged in the learning process are significant in making healthy and sustainable choices now and in the future, as the role of parental involvement and family engagement has an enormous role in influencing the behaviors of youth. As youth grow into adulthood and gain purchasing power, the right to vote, and begin to make decisions about more meaningful and impactful behaviors, it is important that the roots of their decision-making be developed now during their youth, as behaviors are likely to persist throughout adolescence into adulthood (Schunk, 2012; Steinberg, Brown, & Dornbusch, 1996; Whitaker, Wright, Pepe, Seidel, & Dietz, 1997). The positive impacts of family engagement in the acquisition of sustainable literacy and behavior changes also holds a great deal of importance for understanding the way adults learn and behave as it relates to sustainable living. Conservation organizations utilize two broadly defined techniques in promoting environmental behavior changes: social marketing strategies, and environmental literacy educational programs. The way educators communicate messages about sustainability to
varying audiences is delivered using different strategies based on the age of the audience, whereas adults are most often times reached using social marketing strategies, and youth are more often addressed through the use of educational programs (Monroe, 2003). These are important considerations for understanding how to effectively reach both youth and adult audiences through educational materials and programs concerning sustainability.

**Theoretical Framework**

The theoretical framework used to inform the study and the curriculum design used in the study, was based on Bandura’s Social Cognitive Theory (SCT), which posits that learning is best accomplished through the reciprocal personal, behavioral and environmental interactions within a conducive learning environment related to the content being learned (Bandura, 1986). SCT theory emphasizes the learning process as being a result of the constant reciprocal interactions of cognitive, environmental, and behavioral variables which include personal factors of the individual, the environment in which the individual is situated, and the behaviors of everyone that is interacting with the individual within the environment (Bandura, 1986; Schunk, 2012). This interaction is called triadic reciprocality and is a central construct of SCT. The scrapbooks used in this study contained a curriculum related to sustainable living which promoted activity ideas that incorporated hands-on learning opportunities for parents and youth to engage in together. Children first interacted with the sustainable living curriculum while at camp through hands-on learning in the garden. The counselors who delivered the learning material also engaged and modeled behaviors related to the curriculum. The children in the camp program also engaged, in varying degrees with the curriculum, which served as a means of modelling behaviors as well. SCT suggests that learners, with regard to triadic
reciprocity, can successfully learn through observation of others, a term referred to as modeling (Bandura, 1986; Schunk, 2012). Bandura (1986) posited that modelling is successfully used in developing intellectual, social, and behavioral competencies. Providing opportunities for parents and youth to learn and engage in materials and activities together would promote instances of modeling certain behaviors related to living sustainably, and over time, would influence persistent attitude and behavior changes at home. According to SCT, it is of great importance to increase a learner’s sense of self-efficacy, by which their motivation for learning will also be increased (Schunk, 2012). The counselors were given the opportunity to learn from the curriculum prior to the beginning of the two-week camp program, and were able to deliver more lessons and activities within the garden, building their own sense of self-efficacy, and that of the campers. Throughout the data collection and analysis, the SCT construct of triadic reciprocity substantiated the data and observations made by the researcher of the relationships between the participants, the content, and the learning environment.

Definition of Terms

Agricultural Science: A multidisciplinary field of biology used in the research and practice of agriculture. The field draws upon such disciplines of social sciences, ecology, economics, animal sciences, mechanics, plant sciences, environmental sciences, etc. (Hillison, 1996).

Community: A social group of any size whose members share resources, government, and are often times culturally tied (Wikipedia, 2015).
Community Development: Characteristics of a community that emphasize public participation and the use of holistic approaches to decision-making, with an increased dependence on participatory democracy (Cook, 1994).

Community Garden: A public garden, open to members of a community, which “improves people’s quality of life by providing a catalyst for neighborhood and community development, stimulating social interaction, encouraging self-reliance, beautifying neighborhoods, producing nutritious food, reducing family food budgets, conserving resources and creating opportunities for recreation, exercise, therapy and education” (ACGA, 2014).

Family Engagement: Families that learn together grow together, and when families, communities and schools or educational programs work together, learners are more successful and the entire community benefits (U.S. Department of Education, 2015).

Environmental Science: The study of traditional sciences, such as ecology, marine sciences, and atmospheric sciences, as well as social science disciplines as they relate to the environment, such as the pressures on the environment from society and individuals (Holmes & Clark, 2008).

Food Security: “When all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life. Commonly, the concept of food security is defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences” (World Health Organization, 2015).

Public health: Is characterized by the relationship between people and the physical, chemical, and biological components of our natural environments. Population growth and
its associated pressures of development increase the difficulties of sustaining effective public health practices and policies (USGS, 2015).

*Self-efficacy:* People’s beliefs about their own capabilities to perform at different levels of skill and knowledge that have influence over events that affect their lives. These beliefs also determine how people think, feel, and behave (Bandura, 1994).

*Sustainability:* The ability or capacity of something to be maintained or to sustain itself without compromising the potential use for future generations to meet their needs (International Institute for Sustainable Development, 2013), and is the interconnection of social, economic, agricultural, and global environmental factors (Shuttleworth, 2015).

*Urban:* The United States Census Bureau (USCB) classifies urban into two categories: urban areas, that are comprised of 50,000 people or more; and urban clusters, which are comprised of at least 2,500 people but no more than 50,000 people (USCB, 2012). From a social science perspective, urban is a function of several interacting components, and rather the term is a “place-based characteristic [that] incorporate population density, social and economic organization, and the transformation of the natural environment into a built environment” (Weeks, 2008, p. 34).

*Urban Agriculture (UA):* UA is often argued to be much more dynamic than just an activity happening within city limits in that it supports the three components of sustainability: economy, society, and environment (Ackerman et al., 2014), and includes, but is not limited to various industries including forestry, landscaping, community gardening, farming, and roof-top gardening (Morgan, 2009).
Chapter Summary

Research supports the notion that community gardens provide an enriching environment for learning and development, but the learning process does not have to end once removed from the environment. This study explored methods of engagement among campers and counselors within the enriched setting of a garden, and also explored ways family members of those campers were impacted from their children’s experiences. Addressing both youth and adult audiences through a shared curriculum designed not only to educate and engage youth learners, but the intention of which is to overcome the difficulties of reaching adult audiences was the driving force of this study.
CHAPTER 2

REVIEW OF LITERATURE

Introduction

A review of literature on theory and practices of learning was conducted to inform the design of the study and the research objectives. Literature concerning the differences between youth and adult learners helped frame a better understanding of the specific needs of both learner groups and suggested methods of effectively engaging both groups in the learning process. Literature on the benefit of family engagement in the learning process helped support the idea that curriculum and youth camp programs could capitalize on incorporating adult involvement in the learning process. And, finally, literature on the various benefits community gardens provide was reviewed, which helped inform the study of the importance of the learning environment in the learning process.

Social Cognitive Theory

Beginning in the late 1950’s, traditional schools of thought on conditional learning theories, such as behaviorism, were being challenged as incomplete explanations of the learning process (Schunk, 2012). The explanation of learning theory development and changes highlighted the transition from behaviorism to more cognitive theories, when theorists began looking at how people could acquire and express behaviors through a process of observational learning. Albert Bandura has been thought of as being the father of observational learning theory, which expanded to encompass theories of how people seek to gain and assert control over events in their lives through a cognitive process of
self-regulation (Schunk, 2012). Bandura’s theories on social cognitive principles of learning have been considered to be the foundation of the Social Cognitive Theory (SCT). This theory made assumptions about learning as being a comprehensive process involving the reciprocal interactions of individual factors such as cognition, environmental variables in which individuals learn, and the behaviors of individuals with others in the learning environment (Bandura, 1986; Schunk, 2012). The constant reciprocal interaction of cognitive, environmental, and behavioral variables was referred to as triadic reciprocality, which posited that each variable had equal importance within the learning process and constantly influenced one another in differing degrees. An additional key construct within SCT, which stemmed from triadic reciprocality, was called reciprocal determinism. Reciprocal determinism was the idea that a person could be the agent for a behavior change or a responder to that change (Schunk, 2012). This construct posited that examples of good role models (such as a camp counselor or parent at home), beneficial changes in the environment (a camp norm or household norm regarding sustainability), and positive reinforcements could be used to promote desired behavior changes (Schunk, 2012). SCT was strongly associated with the idea that people learned and were motivated to learn and behave by observing others—a process called modeling (Bandura, 1986). Bandura argued that competencies were built through skill acquisition and the strong belief one had in the capability of using those skills (1986). Bandura suggested modelling could promote self-assurance as well as convey skills, and he also posited that the more similar models are to an observer, the greater the likelihood the observer would consider themselves capable of utilizing those skills (Bandura, 1986) and would likely view the actions of the model to be within socially acceptable ways of
behaving (Schunk, 2012). Considering differences in the way youth and adults learn, Schunk (2012) claimed children and adults learned through slightly varying methods, where children were more likely to utilize nonverbal behaviors for learning and could easily connect instruction to actions, and in contrast adults tended to rely on verbal instructions that tied newly learned information to previously learned material (Schunk, 2012). Self-regulation, in SCT, has been explained through the process of goal-setting and self-evaluations of progress, and that learning can be more than just a series of stimulus-response associations, but that behaviors are goal-driven and help direct individual learning (Bandura, 1988). Based on SCT, the most critical factor of an individual’s goal achievement depends on their beliefs concerning their own capabilities in acquiring, retaining, and implementing the necessary actions to learn or perform certain behaviors at varying levels of success (Schunk, 2012). Bandura (1988), referred to the action of goal-setting as being a process that takes place over time and argued “many of the activities that people perform are aimed at obtaining outcomes that are far in the future. Therefore, they have to create for themselves guides and motivators in the present for activities that lead to those desired futures” (p. 290).

**Experiential Learning**

Experiential learning, as an educational practice (Miettinen, 2000) has been utilized extensively within agricultural and environmental education (Roberts, 2006). Closely aligned with constructivism, experiential learning methods are considered to allow learners to construct meaning from their lived experiences (Doolittle & Camp, 1999; Roberts, 2006), which help to establish stronger and deeper understandings of the content being learned. Experiential learning strategies utilize the environment in which
learning takes place, and researchers have argued that “the learning process is not independent from the context in which it occurs” (Roberts, 2006, p. 23). The National Research Council (NRC) (2000), has suggested science curricula should incorporate more opportunities for student’s to participate in hands-on laboratory activities, and posited that learning through direct experiences can increase learner’s skills and content knowledge in various fields of science. Similar to SCT, the successful application of experiential learning practices have relied on the context in which the learning occurs (Roberts, 2006), while learners move through stages of experience, reflection, and reiteration as they progress through life. In Kolb’s (1984) seminal work, experiential learning was based on an empirical epistemology, in which knowledge was acquired from sensory experiences, especially of observation and experimentation. Experiential learning was a more holistic and integrative model of learning that combined cognitive and behavioral concepts of learning while emphasizing the importance of the lived experiences and perceptions of learners (Kolb, 1984). Kolb (1984) defined the nature of experiential learning by drawing upon three models of experiential learning, previously outlined by Lewin, Dewey, and Piaget, by identifying the common characteristics each model shared in describing the experiential learning process. The similarity of the three models all supported the notion that learning was best understood as a process, rather than a focus on the outcomes (Kolb, 1984). Learning was described as the emergent process of deriving concepts from experience and continually modifying them through subsequent experiences; therefore, all learning was essentially viewed as the process of relearning (Kolb, 1984). The outcomes of this learning process were considered to be only of historical record, rather than knowledge of the future (Kolb, 1984). From an
educator’s perspective, the role of teaching would not only be to provide new information, but to build off of previously acquired knowledge. Knowles (1980) described a resistance from learners to accept new ideas that stemmed from conflicts of their previously held beliefs, which were inconsistent with the new information they were receiving:

There is another, subtler reason for emphasizing the utilization of the experience of the learners. A young child identifies himself largely in terms of external definers—who his parents, brothers, and sisters are, where he lives, and to what school and church he goes. As he matures he increasingly defines who he is by his experience. To a child experience is something that happens to him, to an adult, his experience is *who he is*. So in any situation in which an adult’s experience is being devalued or ignored, the adult perceives this as not rejecting just his experience, but rejecting him as a person. Andragogues convey their respect for people by making use of their experience as a resource for learning. (p. 46)

Kolb (1983) suggested the role of the educator as a facilitator to the learning process should be to take into account a learner’s prior beliefs, knowledge, and experiences to find ways of integrating new, more refined ideas into the learning process. Integration was viewed to be one mechanism by which new ideas were adopted by individuals, and was thought to help stabilize a person’s conception of the world (Kolb, 1984). This conflict resolution was considered a part of and integral to the learning process, in which learning itself was a process of tension and conflict, where Kolb (1984) suggested, new knowledge, skills, or attitudes are achieved through confrontation among four modes of experiential learning. Learners…need four different kinds of
abilities—concrete experience abilities, reflective observation abilities, abstract conceptualization abilities, and active experimentation abilities. (p. 30)

**Adult Learners**

Marked differences between the way youth and adults learn has been a focus of educational research, and has suggested adult learners provide a unique audience for programs that aim to implement long-term literacy and behavior changes because they bring with them a variety of experiences from life that have led to having a stronger sense of self, which motivates them in learning relevant material in a more self-directed manner than youth (Holmes & Abington-Cooper, 2000; Knowles, 1973; Monroe, 2003; Yonge, 1985). In Knowles (1973), the importance and role of life experience as it related to adult education was explained as follows:

This assumption is that as an individual matures he accumulates an expanding reservoir of experience that causes him to become an increasingly rich resource for learning, and at the same time provides him with a broadening base to which to relate new learning. Accordingly, in the technology of andragogy there is decreasing emphasis on the transmittal techniques of traditional teaching and increasing emphasis on experiential techniques which tap the experience of the learners and involve them in analyzing their experience. (pp. 45-46)

Merriam, Caffarella, and Baumgartner (2007) posited a framework for conducive learning environments that educators can capitalize on when designing and implementing educational programs. The framework focused on the benefits and appropriateness of self-directed learning models with regard to how adults learn most effectively. Non-formal education was defined as the organized learning opportunities that take place
outside of formal educational settings, and were oftentimes more short-term and voluntary in nature (Merriam, Caffarella, & Baumgartner, 2007). This form of education typically utilized a facilitator of some sort to help guide the educational activities. Two common forms of non-formal education were defined as community-based learning and indigenous learning, which included forms of storytelling. A common goal shared by these types of educational programs was to inspire social action for the enhancement of the communities they served (Merriam et al., 2007). Many educators believed these nonformal educational programs were powerful tools in promoting change and empowering individuals to have more control over their lives (Merriam et al., 2007). Informal learning was viewed as the spontaneous and unstructured form of learning which takes place in our daily lives, and was considered the most prevalent form of adult learning because it was embedded in everyday activities. Shugurensky (2000) suggested there are three distinct types of informal learning, including self-directed learning, incidental learning, and socialization, or tacit learning. Self-directed learning was the most widely identified and studied form of informal learning, and was considered the intentional and conscious act of seeking opportunities to learn even before the learning begins (Schugurensky, 2000). Schugurensky argued that the concept of informal learning does not necessarily mean adults are independent learners, in fact, adults often rely on other people or sources to assist them with their learning, including books, Internet, relatives, friends, universities, and their own experiences (2000). In the context of this study, curriculum was used so that youth learners had something to take home to share with adults. As Shugurensky suggested, this may have assisted adults in integrating concepts youth learned at camp back into the home environment (2000).
Family and Parental Involvement

Adolescence, a critical period in youth, has been characterized by major developmental changes, affecting physical and psychosocial processes. This can be a sensitive period of time in which youth seek more autonomy and are more influenced by their peer groups (Maxwell, 2002). Adolescents are also at high risk for behavior and health issues that result from poor nutrition, inadequate exercise, and substance abuse behaviors (Neumark-Sztainer, Larson, Fulkerson, Eisenberg, & Story, 2009). Research has also shown children who are overweight or obese in childhood will be at greater risk of being overweight or obese as an adult (Whitaker et al., 1997). Furthermore, children from lower income families and racial minorities are more likely to be overweight or obese (Ogden & Carroll, 2010). Parental involvement and family norms impact youth development, and can influence decisions, beliefs, and the persistence of behaviors well into adulthood (Whitaker et al., 1997). These behaviors are likely to include those related to sustainability.

Families can provide a unique foundational structure within society, and often play a critical role in the health and prosperity of communities (Garst, Baughman, Franz, & Seidel, 2013). Previous research examined the benefits family camp experiences had on family functioning and showed that participation in unique outdoor experiences, with support from high-quality camp staff, provided opportunities for positive family interactions and reinforced good parenting and stronger family relationships (Garst et al., 2013). Camino (2000) argued that “strong communities are built on active participation and civic engagement of members, including youth” (p. 11). Furthermore, when community members of all ages were actively engaged and collaborating, the community
experienced more civic stability, higher levels of social justice, stronger political advocacy, and increased community member consensus (Langton, 1987).

Beyond the positive health and community benefits that can be seen from stronger parental and family engagement, parents can also be instrumental in establishing the educational trajectory of youth by involving them in certain educational programs or activities that are more focused on a particular area of interest (Schunk, 2012; Steinberg, Brown, & Dornbusch, 1996). The significance of parental involvement in youth education has been well documented, with more recent studies indicating youth were more academically engaged in formal education environments when their parents were more involved in their education (Cheung & Pomerantz, 2011; Simons-Morton & Crump, 2003; Wang & Sheikh-Khalil, 2014). This active parental involvement, or engagement, can help build critical learning skills, competencies, and values in youth that contribute to their successful transition into adulthood (Anguiano, 2004; Wang & Holcombe, 2010; Wang & Sheikh-Khalil, 2014). Parents have the ability to establish home environments that can either support or undermine youth’s experiences and learning (establishing a home norm), which can further emphasize the importance positive collaborative experiences have on youth and family development (Connell & Wellborn, 1991). In a study of middle school-aged children, Simons-Morton and Crump (2003) confirmed the importance of parental involvement in their children’s school adjustment and engagement. They further illustrated the difficulties parents had in participating in the lives of their early adolescent children “given the complexity of modern life, the nature of early adolescent development, and the impersonal environments of many modern middle
schools. However, by overcoming these obstacles, parents may facilitate their children’s adjustment to school and commitment to academic achievement” (p. 125).

Likewise, parents can benefit from the active engagement with their youth, where the benefits of promoting and building Y/APs has been well researched, with its application deeply engrained in 4-H programs through Extension Services (National 4-H Council, 2015). The concept of Y/APs dates further back, when the National Commission on Resources for Youth (1976) described these partnerships:

Youth partnership can thus be defined as involving youth in responsible, challenging action, that meets genuine needs, with opportunity for planning and/or decision making affecting others, in an activity whose impact or consequences extends to others—i.e., outside or beyond the youth participants themselves. (p. 25)

More recent research examined the function of Y/APs that are characterized by more collaborative relationships between youth and adults, as Mitra (2008) defined them as “collaborative learning environments where [young people and adults] come together in groups, with the willingness to share authority, accept responsibility, and highlight individual members’ abilities and contributions” (p.8). These relationships move past the hierarchical concept of power to a more balanced concept where youth and adult development becomes the center of successful YAPs (Christens & Zeldin, 2012; Serido, Borden, & Perkins, 2011). The benefits of these collaborative relationships can be vast, where youth and adults work together to reach a common goal that can help influence meaningful community-based changes (Mitra, 2008).
Another critical factor of youth development and learning can be tied to socioeconomic status (SES), which Oakes and Rossi (2003) maintain is a construct that reflects an individual’s or group’s access, or lack thereof, to desired resources, be they material goods, services, knowledge, money, power, social networks, healthcare, leisure time, or educational opportunities. Families considered to be of low SES typically are comprised of parents with minimal education, less money, lower-earning occupations, and less access to other social connections that are important in providing necessary resources for learning, socialization, and cognitive development (Schunk, 2012). Access to such resources allows families to thrive in their community, and families with higher socioeconomic status tend to maintain their status as well as invest time and energy in setting a foundation for their youth to also maintain a higher SES (Oakes & Rossi, 2003). The importance of understanding SES, according to Oakes and Rossi (2003) is that is has been related to health and life outcomes, where those who have a higher SES, along with their families, have better chances at living longer, healthier lives.

In consideration of the impact parental involvement has on positive youth development (Cheung & Pomerantz, 2011; Simons-Morton & Crump, 2003; Wang & Sheikh-Khalil, 2014), and likewise, the positive impacts youth have on adults’ lives, educational programs should encourage the active support and engagement of parental involvement with youth (Simons-Morton & Crump, 2003), and invest time and resources in strategies which will foster stronger connections to environment-based participatory programs (Monroe, 2003). The efforts of CNC are in line with these recommendations and warranted further study to understand the programmatic elements which are most successful at promoting sustainable practices at home.
Community Gardening and Environment-Based Education Programs

Montessori (1964) expressed her beliefs of the role gardening had on children based on her observations of inner-city youth in Rome. Montessori came to believe that teaching children how to garden would help them think more intelligently regarding nature, and would instill components of a moral foundation in their education (1964). More recently, gardening programs have become more popular around the nation as they are believed to provide many positive impacts on children, adults, and communities (Armstrong, 2000; Odera, Lamm, & Owens 2013). Some of the benefits of community gardens are increased academic performance of students, environmental awareness of individuals, improved social skills, exercise and health benefits, poverty alleviation, and economic stimulus for local economies (Armstrong, 2000; Owens et al., 2013; Vitiello & Wolf-Powers, 2014). Community gardens can improve social networks and empower communities through increased organizational capacity, especially within lower income neighborhoods. Community gardening programs have contributed to health benefits through social support networks and peer-to-peer intervention tactics that encouraged changes in nutrition and exercise (Armstrong, 2000). Community gardening has been seen to contribute significantly to community wellbeing by helping to develop stronger social connections between community members, strengthen building capacity of neighborhoods, and empower community members living in urban neighborhoods, and is considered to be the most pervasive form of economic benefit within urban agriculture (Vitiello & Wolf-Powers, 2014).

Urban agriculture has become the center of the growing local food movement, with more national interest in changing cities to foster both healthier residents and more
sustainable communities through development of sustainable agricultural educational programs for youth and adults (Vitiello & Wolf-Powers, 2014). The impact urban agricultural programs have had on youth have shown increased health, social, ecological and economic literacies, including cooking, basic business skills and technical skills that prepare them for employment (Lawson & McNally, 1995; Vitiello & Wolf-Powers, 2014). The breadth of benefits urban agriculture has had includes increased food security, community and economic development, and has played a major role within the public health, transportation, and environmental conservation sectors of government and society (Vitiello & Wolf-Powers, 2014).

One of the benefits of environment-based educational programs, such as community gardens, has been shown to provide connections to other disciplines that can contribute to a well-rounded, quality education (Monroe, 2003). Researchers have found that gaining access to youth audiences for implementing these environment-based educational programs can be much easier than capturing adult audiences, which poses a challenge in providing opportunities that includes parents and families within these beneficial programs (Monroe, 2003; Simons-Morton & Crump, 2003).

**Literacy and Behavior Changes**

Stern (2000a) suggested several widely held beliefs about how humans interact with the environment, as well as several common angles from which research aims to address and promote behavior changes, including education as a means for influencing those changes. Stern recommended researchers evaluate these common beliefs to identify, understand, and change the situational factors affecting society as a means of changing behavior. Stern also emphasized the indirect impact individuals can have on the
environment by their influence within public policy decisions (2000a). Some researchers suggested that behavior, in general, can refer not only to the specific actions an individual displays, but also encapsulates the act of seeking information, making decisions, and valuing certain ethics related to that information (Hungerford & Volk, 1990; Stern, 2000b). A study by Gorham, Lamm, and Rumble (2014) looked at effective ways of communicating conservation behaviors to individuals, and stressed the role of critical thinking in communication and decision-making. The researchers separated people by two distinctions based on how they gathered and processed information. Seekers tended to think critically about information they had intentionally sought out through reading literature, research, or posing questions, while those who were considered to be engagers, cognitively processed information they had gleaned from their environment, such as personal conversations and interactions (Gorham, Lamm, & Rumble, 2014; Lamm & Irani, 2011). Both seekers and engagers were viewed to be active participants in the behavioral process.

Some effective strategies for influencing sustainable behaviors have been well-documented within the literature of social-marketing techniques, in which a targeted audience receives tailored messages to promote desired ideas or behavior changes based on the audience’s interests and characteristics (McKenzie-Mohr & Smith, 1999; Monroe, 2003). Understanding the values and perceptions of audiences helped social marketers in targeting and designing specific messages that were most likely going to motivate those individuals to act in a desired way (McKenzie-Mohr & Smith, 1999). Other important strategies to help encourage behavior change has been to provide relevant information to audiences in a variety of ways that builds on different types of knowledge (Monroe,
2003), as well as to provide opportunities for people to become involved in activities that help draw commitment from them and work to increase the likelihood of affecting desired behavior changes (Monroe, 2003).

**Chapter Summary**

Youth and adults learn in different ways and in different environments; however, both groups share a common ground for which learning can occur, where shared experiences build upon each learners’ unique lived experiences, beliefs, and motivations. Researchers suggested the importance of crafting educational programs that promote collaborative learning opportunities between youth and adults. Agricultural and environmental educational programs can have a multidisciplinary influence on learning that provides a holistic educational experience, whereby SCT and experiential learning practices both play a critical role in understanding how to design and implement such collaborative, environmentally-based educational programs and provide the theoretical framework from which educators can build upon.
CHAPTER 3

METHODS

Introduction

This chapter describes the specific methods utilized in this study. This chapter also details the ontological, epistemological, and theoretical perspectives, data collection methods, data analysis methods, the measures of trustworthiness and rigor utilized in this study, and the subjectivity of the researcher. The purpose of this study was to identify factors that influenced parental involvement and family engagement in children’s learning of a curriculum designed around sustainable living, which included good health and nutrition, sustainable agricultural practices, support of local food, environmental issues, and community involvement. The research objectives that guided this study were as follows:

1) Describe how the counselors of the camp influenced the learning and engagement of campers related to the sustainable living curriculum throughout the camp program.

2) Describe how the sustainable living scrapbook was utilized in the learning process at camp.

3) Examine how adult audiences were reached through an educational youth camp program regarding sustainability attended by their children.
4) Identify the values parents of this study have for family engagement and learning with regard to their children’s educational camp experiences.

**Research Approach**

This study utilized qualitative research methodology. Creswell (2013) described qualitative research:

Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature or a call for change. (p. 44)

To develop an in-depth understanding of the research objectives, the research was carried out as a qualitative case study. Merriam (1998) defines a qualitative case study as “an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit” (p. xiii). The case in the present study was the utilization of the scrapbook curriculum at GROW Camp and its influence on the learning process. Prior to beginning research, qualitative researchers should conduct a thorough review of the literature and identify a theoretical framework
from which research questions or objectives are constructed (Merriam, 1998). Merriam posited that the researcher begins a study with their own construction of reality, which interacts with others’ interpretations of the phenomenon being studied, and the final product is a more refined interpretation, made by the researcher, through their own view (Merriam, 1998). Furthermore, the researcher should identify the physiological assumptions under which they operate (Creswell, 2013). These assumptions include: ontological, what is real; epistemological, how we know; axiological, the role of values; rhetorical, how we use language; and methodological, what the process of research is.

**Ontology and Epistemology**

**Realism**

The ontological perspective of this study was realism, or the assumptions about the nature of reality, which “range from the view that the world of objects and social structures exists independent of human experience to the idea that, although the world exists independent of any one person, human perception is such that our reality is a preinterpreted one” (Madill, 2008, p. 632). Realism accepts that a real world exists and that each person has their own view of reality and have different interpretations of what is happening, deduced through individual methods of sense-making from the interaction between the individual and the physical world (Turner, 2008). In this study, participants either engaged with the scrapbooks directly and/or experienced the camp program through interactions with their children, who attended the camp. This research utilized a realist approach, which assumed each individual that was part of the program, either directly or indirectly, had a unique reality in which truth existed.
**Constructionism**

The epistemological perspective of this study was that of constructionism. Constructionism epistemologies posited that the content every individual used to construct their own reality was based on social constructions, such as language and discourse, social norms, and power (Patton, 2002). Constructionism holds that knowledge is created through the interactions of individuals through their unique lenses of reality (Crotty, 2010). Therefore, it can be assumed that every individual constructs different meanings of events, even when experiencing the same phenomenon (Crotty, 2010). For this reason, it was pertinent to the study that the researcher gained insight of the differing experiences the counselors and parents had concerning the camp program and their beliefs of the factors of effective learning and engagement.

**Theoretical Perspective**

The theoretical perspective used to guide this study was constructivism. Denzin and Lincoln (2000) defined constructivism as an individual’s construction of knowledge that is developed through interactions between the individual and an object. Constructivism rejects the idea that there exists objective knowledge that can be retrieved mechanically; instead, individuals construct meaning through their personal interactions, previous experiences, and established schemas of a particular phenomenon (Crotty, 2010). Costantino (2008) suggested “this research paradigm represents a change from the focus on explaining phenomena typical in the natural sciences to an emphasis on understanding, which is deemed more appropriate for investigating phenomena in the human sciences” (p. 117). Individual parent interviews were conducted to gain a deeper understanding of the research questions. Parent interviews were one-on-one with the
researcher and did not allow for a social construction of their beliefs, rather, the responses to interview questions were representative of the participant’s individual beliefs and reflections; therefore, the data collected was interpreted from a constructivist perspective.

**Procedures**

**Design of the Study**

This study utilized a treatment and control group design method (source) for examining the potential differences between parents whose children created the scrapbooks at camp and parents whose children did not create scrapbooks at camp.

**Curriculum Development and Implementation**

The scrapbook curriculum content was developed by the researcher in coordination with the daily learning objectives established by the camp director and was guided by the tenets of SCT with a focus on the process of triadic reciprocity. The researcher met with the camp director and camp counselors prior to data collection to pre-brief counselors on the content, structure and function of the scrapbooks, as well as to establish more buy-in and ownership from the stakeholders. A counselor’s guide for delivering scrapbook materials was given to both counselors as a delivery protocol to be followed during a specified two-week period of camp to help ensure consistency in delivery of information. Camp counselors were responsible for teaching and implementing the scrapbook curriculum during one session of GROW Camp, which included two age groups (rising 4th and 5th graders, and rising 6th and 7th graders).
Participant Selection and Recruitment

Participants.

Participants were selected through the process of purposive sampling, which Palys (2008) suggested is a process which allows the researcher to select from a specified group of individuals that are able to provide in-depth responses to the research questions pertaining to a smaller population. Thus the participant criterion included parents or guardians of children who attended the GROW Camp sessions during the summer of 2015. This style of sampling allowed the researcher to understand how individuals of a similar demographic related to their families with regard to sustainability and the GROW Camp program. All of the participants reported living in suburbs of Atlanta, Georgia, with four living in Marietta, two living in Roswell, and one living in Alpharetta.

Demographics.

On average, Marietta residents are considered to be of middle socioeconomic status. Socioeconomic status is most often calculated by evaluating a combination of variables that determine a family’s or individual’s economic and social position in relation to others, based on household income, parental education attainment, and occupation (Cowan et al., 2012). Marietta has a population size of 57,790 people, with 38% of adults 25 years of age or older who have earned a bachelor’s degree or higher. The average household income in 2013 was $62,103, with 21% of residents below poverty level (American Community Survey [ACS], 2010-2014).

On average, Roswell residents are considered to be of middle to high socioeconomic status. Roswell has a population size of 90,959 residents, with 55% of
adults 25 years of age or older who have earned a bachelor’s degree or higher. The average household income in 2013 was $107,417, with only 9% of residents below poverty level (American Community Survey [ACS], 2010-2014).

On average, Alpharetta residents are of middle to high socioeconomic status. Alpharetta has a population size of 59,553 residents, with 62% of adults 25 years of age and older who received a bachelor’s degree or higher. The average household income in 2013 was $112,480, with only 4% of residents below poverty level (American Community Survey [ACS], 2010-2014).

Recruitment.

Immediately following the end of the two-week camp program that utilized the scrapbooks, the two camp counselors of each age group (rising 4th-5th graders, and rising 6th-7th graders) participated in a focused group interview, while on site at the CNC. The camp counselors were asked to participate in the interview before camp began during the pre-brief meeting, and were reminded of the interview during the last week of the camp program. Use of Dillman’s Tailored Design Method (2014) was employed in designing and implementing personalized e-mail and telephone recruitment scripts in requesting participation for focus groups. The personalize recruitment e-mails were sent to parents of campers that attended GROW Camp throughout the summer of 2015. These e-mails were sent immediately following the end of the two-week program that utilized the sustainable-living curriculum and scrapbooks. Follow-up e-mails were sent to parents who did not respond, and phone call scripts were utilized as a final point of contact during the recruitment effort. Participants were incentivized by offering each household two tickets to the 4th Annual Harvest on the Hooch Event, a food and wine event that
celebrated farm to table, with live music, garden games, and provided an opportunity for families to support the Nature Center’s Unity Garden.

The original research design of this study planned for two focus groups to be conducted following the end of the two-week camp session, one focus group was designated for parents of campers who had not created scrapbooks at camp and the second focus group was designated for parents of campers who had created scrapbooks during camp. One focus group took place with three parents, two of which were from the same household; therefore, the researcher considered the focus group to only represent two households. Due to insufficient participant recruitment, the focus group that took place served as a pilot focus group, which helped inform the researcher of departures from the research assumptions of how the scrapbook would be utilized. This pilot focus group was used to design an interview protocol for individual parent interviews. Following the pilot focus group, parents were contacted a second time via personalized e-mails in an attempt to recruit participation for individual phone interviews. The same incentive was provided for participation in the phone interviews.

**Data Collection**

**Field Observations.**

Direct observations were made in the field during the implementation of the sustainable-living curriculum throughout the two-week summer camp program. Detailed field notes were taken regarding the interactions of the counselors with the campers, researcher anecdotes from personal interactions with counselors and campers,
photographs, and quotes from comments between counselors and campers that were made during the implementation of the scrapbook material and camp activities.

**Interviews.**

A dyadic interview (Morgan, Ataie, Carder, & Hoffman, 2013) was conducted with the two camp counselors immediately following the end of the two-week camp session in which the sustainable-living curriculum was utilized. The interview was conducted concerning the delivery of the curriculum and to gain a deeper understanding of the counselors’ perceptions of the camp program and the learning process.

Individual semi-structured interviews (Creswell, 2013) were conducted with seven parents of campers approximately one month following the end of the two-week summer camp program via phone interviews. Three of the seven participants were parents of campers who did not create scrapbooks during camp and four of the seven participants were parents of campers who did create scrapbooks during camp. The interviews began with the researcher reading the consent form aloud and obtaining a verbal consent from each participant. Once the consent forms were read and verbally signed for, the researcher read the optional demographics form aloud to each participant. Due to the personal nature of some of the questions, participants were told they could say “pass” if they felt uncomfortable sharing certain information to any of the questions. Each interview was audio recorded and transcribed, word for word. Each of the seven interviews ranged from 30 to 50 minutes. The transcribed interviews were returned to the participants to verify the accuracy of the transcription, as well as to ensure the intentions of the participants’ responses were accurately conveyed during the interview.
Responses of those who had received the scrapbooks were compared to those who had not received the scrapbook in order to evaluate potential differences in family engagement and learning between the two groups of parents.

**Data Analysis**

Only one researcher was present for making observations and taking field notes, and likewise, was responsible for transcribing and analyzing the research data. A thematic analysis was employed to identify and describe emergent themes from the transcribed interviews. Guest, MacQueen, and Namey (2012) defined thematic analysis as a process that allows the researcher to pinpoint, code, record, and examine common patterns and themes within data sets, requires major involvement from the researcher, and can be an ideal method for analyzing large amounts of data. The themes become the categories for analysis. Guest et al. (p. 11) suggested that “a thematic analysis is still the most useful in capturing the complexities of meaning within a textual data set...and is also the most commonly used method of analysis in qualitative research.” Emergent themes have been considered to be the building block of inductive approaches to qualitative social science research, presenting themselves through a process of coding the texts of research participants as they narrate their perceptions of the world (Williams, 2008). Themes not only emerged from transcriptions of interviews, but also emerged through the careful analysis of other collected data sources, such as researcher fieldnotes, reflective anecdotes, and various artifacts, such as photographs and artwork from the campers (Williams, 2008).
Measures of Trustworthiness and Rigor

Lincoln and Guba (1985) provided commonly used strategies to help establish trustworthiness and rigor within research, which are credibility, transferability, dependability, and confirmability. Measures of credibility were taken through triangulation, peer debriefing, persistent observation, and member-checking (Lincoln & Guba, 1985). Multiple sources of evidence were collected throughout the research to help ensure a system of triangulation. Evidence included in depth documentation from direct and participant observations during the GROW Camp program, as well as in-depth interviews, and program artifacts from the scrapbook curriculum. The researcher worked with other researchers not directly associated to the study to help validate the analysis methods through peer debriefing. Interviews were conducted with the GROW Camp counselors as well as with the parents of the campers. Counselors and parents provided the sources of evidence via focused interviews. The recorded interviews were transcribed and returned to interviewees for member checking. A chain of evidence was established by returning transcriptions to the interviewees to check the content and intent of the responses, assuring the authenticity of the interviews.

Transferability was established through thick descriptions of the context and the data to help provide a clear and detailed explanation of the research and the findings. Measures of dependability were taken through detailed and reflexive journals from the researcher, indicating any changes that took place during the study and within the research environment to help account for deviations in methodology. Similarly, confirmability was established by detailing any changes that took place, and was corroborated by other researchers who were directly and indirectly related to the study.
Although much care was given to ensure trustworthiness and rigor throughout the data collection and analysis of this study, the researcher acknowledges the limitations of the findings due to the interpretation and subjectivity of the researcher (Denzin & Lincoln, 2000).

**Researcher Subjectivity Statement**

As I’ve grown, I have become increasingly interested in the intersection of education and the outdoors, blending who I am and what I care about into a career path. The values I have for pedagogical and androgogical methods that involve the triadic reciprocality, as defined in SCT, can be seen in how I entertain beliefs and assumptions of how to teach and learn. My past and these assumptions are important to discuss because they shape how I view the world and the possibilities I believe in with regard to learning. I strongly believe in the positive impact family members have on one another’s learning, regardless of age, and I strongly believe that strengthening family engagement has the power to positively impact communities and society-at large. I believe that education is not a top-down flow of information, but rather, is a circulation of information and experiences through the individual, the environment, and the social interactions of others. This strong personal belief informed my assumptions and desires for the study, as I had hoped to help contribute to finding efficient and empowering tools and methods for educating youth and adults together, in an effort to help forge stronger, healthier family relationships and draw attention to sustainable agricultural practices and environmental stewardship. My intention in this study was to provide a preview of a method for teaching and delivering material at a summer camp program that would be shared with the families of the campers.
Chapter Summary

Development of this study centered upon the delivery of a shared sustainable living curriculum between counselors, campers, and the parents of campers, and what the impacts of a program such as this had on parents’ perceptions of sustainability and family engagement. The curriculum was designed based on the seminal works of Bandura’s (1986) SCT, capitalizing on observational learning opportunities, modeling, and building self-efficacy of learners. The curriculum was also developed in consideration of Kolb’s (1984) experiential learning model, employing the concepts of concrete experience, reflective observation, abstract conceptualization, and active experimentation.

Direct observations were made during the implementation of the curriculum at camp, and focused interviews were conducted with camp counselors and parents following the end of the camp session. The data were analyzed utilizing a thematic analysis. Measures of trustworthiness and rigor were taken throughout the data collection and analysis of this study.
CHAPTER 4

FINDINGS

Introduction

The GROW Camp program served as the site for this study. GROW Camp is based on sustainable gardening practices, environmental sciences, and the role the garden serves in the greater community. Children enrolled in the summer camp program were separated into two age groups, rising 4th and 5th graders, and rising 6th and 7th graders. Each morning of camp, the children spent an hour to two hours at the CNC Unity Garden, learning about growing food and the role gardens and food play in sustaining communities. As an exploratory case study that examined several phenomena among various participant groups, the findings of this study fell into several distinct categories, as follows: (1) curriculum delivery; (2) counselors; and (3) parents.

Curriculum Delivery

Counselors allowed room for creativity and spontaneity during the delivery of the curriculum and scrapbook activities, as they became familiar with the individual and collective needs of their campers; therefore, slight departures were made from the delivery protocol that was given to the counselors prior to camp. Each day of the two-week program that was studied, the researcher observed and interacted with the counselors and campers at various times throughout the day, as each day allowed for different times for activities and time in the garden. The camp counselors taught the
campers different lessons throughout the day that introduced the topics from the scrapbook curriculum. The daily camp schedule designated one hour toward snack time, which was an ideal time to eat and talk about what the campers had learned that morning, and then transition the conversation to the scrapbook lessons and activities. The counselors had the freedom to rearrange their schedules according to the needs of their campers, which allowed the researcher to be present every day, for two weeks, in order to observe the scrapbook implementation and associated activities.

Counselors

One camp counselor was a female, and the other was a male. Both counselors in this study were in their early twenties, Caucasian, were current college students, and had prior interests in early childhood education. Both counselors had worked with other groups of campers throughout the summer, and were able to compare their experiences of the camp programs with and without the use of the scrapbook curriculum. Counselor-1 is a female, who is attending a university in preparation to be an early childhood educator. She mentioned feeling very strongly about sustainability and education. Counselor-1 often mentioned her close connection to her family, especially with her mother. This counselor worked with the children who were going into 6th and 7th grade. Counselor-2 is a male, who is also attending a university, studying biological sciences. Counselor-2 mentioned that he felt very strongly about the environment, good nutrition and exercise. This counselor worked with the children going into 4th and 5th grade. The areas of interest the counselors shared were observed throughout the data collection, as the counselors would express and display increased excitement, creativity, and confidence when delivering the content they most connected with.
### Table 1: Counselors

<table>
<thead>
<tr>
<th>Counselor</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Major in College</th>
<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselor-1</td>
<td>Female</td>
<td>Caucasian</td>
<td>Early Childhood Ed.</td>
<td>6th-7th</td>
</tr>
<tr>
<td>Counselor-2</td>
<td>Male</td>
<td>Caucasian</td>
<td>Biological Science</td>
<td>4th-5th</td>
</tr>
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### Counselor Interview

To better understand the learning process and engagement opportunities of campers, camp counselors were asked to reflect on their camp experiences of camp sessions that took place before the scrapbooks were implemented and then to reflect on the camp experiences from the sessions that took place while the scrapbooks were used. Eight themes emerged from the counselor dyadic interview (Morgan et al., 2013), as they related to the use of the scrapbooks as an educational tool as well as the role the counselors played in delivering the material. The eight themes were (1) time learning in the garden was increased/is beneficial, (2) benefits of experiential learning, (3) depth of conversations/interactions were improved with use of the scrapbook, (4) kids like taking ownership of learning, activities, and scrapbook, (5) counselor’s learning and self-efficacy improved and increased engagement with campers, (6) importance of time management and pre-planning to improve learning, (7) observational learning and peer motivation, and (8) a variety of learning opportunities is beneficial for camper engagement.

**Time learning in the garden was increased and is beneficial for engagement.**

The counselors reported that the scrapbooks provided more opportunities for learning in the garden than they had experienced in previous camp sessions. Counselor-1 reflected on the two camp sessions and remarked “I think just seeing how much in this session the kids were in the garden was really amazing to me and to kind of see it all
come together.” The importance of being in the garden while teaching about sustainable agriculture was further emphasized by Counselor-1 adding, “I think the best way to do it is to really be in the garden incorporating, starting to talk about it before, or being wherever it’s going to take place.” The scrapbooks themselves were mentioned by the counselors as serving as the catalyst for spending more time in the garden as opposed to regular camp activities, as Counselor-1 recalled,

my kids, it made them go into the garden. I’ve never had…I know you only did it only one week before this but the kids were in the garden, I would say two or three times more in this session than they were in any other session because we had these notebooks and because they were in the garden so that way, they can just go and when they were done, I know Sam (pseudonym) would be finished pretty early but then he would want to go and do something in the garden versus just wanting to play cards all the time or just wanting to run around the gym or whatever it is.

This comment sparked a side conversation between the two counselors:

Counselor-1: “I felt like I was in the garden so much more with them. I don’t know if you noticed that between the one-week session that we worked together.”

Counselor-2: “Yeah. We were always in the garden.”

Counselor-1: “I felt like I was in the garden so much more.”

Counselor-2: “This binder, because the first week session that I was in, we got in trouble by the parents, remember?”

Counselor-1: “We did, yeah. Because we weren’t in the garden enough. We didn’t have enough activities in the garden, and so having this binder-”

Counselor-2: “-Was able to provide it.”
Depth of conversations and interactions were improved with use of scrapbook.

The counselors shared their thoughts on how the scrapbooks influenced learning and engagement. Counselor-1 reflected on the difference of engagement from the different camp sessions, and shared that,

I got to know the kids so much better so that was kind of how we talked about the equal rights for everyone, men and women, was because we had already had this foundation from these books and so for me, that was really cool was to have it span out into other things and create so many more teachable moments.

Counselor-2 responded to this statement by saying “Yeah, I definitely agree. With this group of kids, I became so much more involved than any other group and I do believe it has to do with the garden and the scrapbook building.” A moment of personal reflection from Counselor-1 revealed the importance of connecting with children on a meaningful level, saying,

I feel like because we've already had this conversation-based learning already in place, because before in camp you're just going from one activity to the next. You really don't ever sit and actually talk to the kids, which I know sounds kind of weird when you actually say that out loud, but we really don't talk to the kids.

Part of building stronger relationships with campers involved self-guided research on the counselor’s behalf, as one comment by Counselor-2 suggested,

that's what I was most intrigued about and I felt like it made the kids realize water is so much more important, you know, and we should respect it a lot more than we do, so I did look up some more facts about water and stuff like that.
This idea of building stronger knowledge and connections to the materials was further emphasized in one comment regarding Counselor-1’s interest in building stronger ties to the children as well as the scrapbook material, recalling,

‘okay, front side has a lot of information and then backside has more to do with the activity,’ was helpful so being able to quickly glance at that. I also went home and made my own notes about things and what I was really thinking about was how am I going to teach the kids that and I think that just kind of goes because that's what my degree is going to be in, is in education.

Counselor’s learning and self-efficacy improved and increased engagement with campers.

The counselors reported how their own learning and confidence increased as a result of using the scrapbooks as a tool to deliver the content material and in turn, reported that their increased confidence allowed for closer engagement with the campers. Counselor-1 talked about the differences between the camp sessions, stating that, the kids were so much more engaged in this one. So much more engaged. I felt like I had more to talk about because I was pretty lost in the previous two-week session in terms of just what do you talk to them about? Counselor-2 reflected on the difference in competency from the previous camp sessions as well, saying,

I mean, I've definitely learned a lot as I said earlier. I learned stuff from the H20 [lesson]. I feel like I could be a better gardener right now. I've actually learned a lot about the pollinators as well. I feel like if I apply for this job again next
semester, I would love to do Grow Camp and I feel like I could teach this material so much more efficiently now.

The importance of having an intentional camp curriculum made available to counselors is further emphasized in a reflection from Counselor-1:

This has been really, really cool because I just didn't even know where to start on how to teach Grow Camp or how to teach these kids anything and I think it was kind of, for me, it was intimidating to talk to the kids about certain issues especially the hunger in Georgia and to have this has been really helpful and really empowering for me and I've noticed that this two-week session, I feel like I've really hit my stride with interacting and teaching the kids and I really think it has to do with having this as a tool.

**Importance of time management and pre-planning to improve learning.**

The counselors discussed how critical pre-planning and time management were in the successful delivery of educational material. Both counselors mentioned challenges in delivering the material due to a lack of background information and not having adequate time to plan, as was expressed by Counselor-1:

I think having more background information that I could look up maybe on and accompanying this sheet for someone who maybe doesn't know as much, and I think too ... For me, sometimes, and this also goes to I think having the program in advance probably when you're making out your schedule because then you're already starting to think, ‘Okay. How can I correlate it with the activity?’

Counselor-2 agreed and added a comment in reference to his schedule, saying,
I had to change it so many different times. I've never had to do that but honestly, everything else was perfect. There's just the time management. There was a few times that I was running late for lunch, stuff like that. Other than that and honestly, I wouldn't say that's really like your fault. I just felt like we should have correlated more efficiently.

Time management, in this theme, also referred to organizing the day to incorporate a specific time dedicated to working on the scrapbooks, as Counselor-1 pointed out, because kids really like routine so I think having some sort of routine, so I think that's why it worked out well after snack is because we kept doing that for a couple of days so the kids got in that rhythm of saying, ‘Okay. We've just done this activity, we've had our snack, now it's our time to journal,’ and I think if you start that, especially earlier on, I think that that can make that transition smoother.

**Benefits of Experiential Learning.**

The counselors recalled experiences during camp in which campers were able to be more hands-on and “learn by doing.” When reflecting on some of their favorite experiences, Counselor-2 laughed as he remembered his experience with the campers the day they learned about composting, saying, “They enjoyed it and they were able to learn a lot from this one, and I feel like the kids were more intrigued with trying to catch worms.” Counselor-1 remembered another activity, sharing, the cooking with herbs [lesson], they loved just eating and having those things so I think having those good hands-on activities really made it even if that was something that they hadn't experienced before, it made it more relatable to them.
The idea that the closer a learning experience is to real life the more robust the learning is was also shared by Counselor-1 when reflecting on how the end of the two-week session was concluded with a field trip to a local food pantry and a restaurant that specialized in cooking locally grown foods. Counselor-1 said,

I know that some of them went home or are going to go home and really be aware of that and a big thing for us was the talking about the hunger thing and I think that just going a field trip kind of made them want to engage with that concept more.

**Kids like taking ownership of learning, activities, and scrapbook.**

In this theme, the counselors talked about the importance of children having more control of their learning experiences, and taking ownership of their scrapbooks was beneficial in getting the initial “buy in” from the campers. This is reflected in a statement from Counselor-2, saying,

when you first came in, you straight told the kids that, ‘This is your binder. This is your scrapbook. Do what you will with it.’ I feel like they enjoyed it because they had a lot of control with it and most stuff at that age, they really don't have a lot of control with.

Self-directed learning was further emphasized in a comment from Counselor-1, adding,

I think also making it known from the beginning that they could work on it for whatever length of time because I found that some kids maybe didn't want to work on it for so long but gradually, as the time went on, they would put more effort into the ones they maybe just connected with more.
A high level of engagement of campers was observed with activities that required their creativity, as was stated by Counselor-1:

I think my kids really liked the fact that on the H2O [lesson] they had created their own challenge items, and I think having that space where they could create their own [challenges] and it was in there was helpful.

Counselor-2 expressed his appreciation of a camper’s creative synthesis of the material by producing a piece of artwork that integrated several concepts from the curriculum, recalling “That right there was completely her creation so I was very proud of her for doing that and I feel like that was because we told them, ‘Do what you want.’”

**Observational learning and peer motivation.**

The counselors revealed several instances in which they or the campers were motivated by others or learned by observing their peers behave a certain way. Counselor-1 smiled when recalling how excited everyone was with one of the activities on how to conserve water, saying,

they kept coming up to me to whisper in my ear their strategy of how they were going to do it. They were like, ‘Oh, I'm going to turn the water off in between,’ and then it made me think, ‘Oh gosh. I got to do that now too,’ so that was good though.

That excitement and motivation was shared by Counselor-2 while recounting one of their experiences:

Since my major is biology, I love going more in depth in everything as you saw with the unsaturated and saturated fats. I did forget to mention that that was
honestly probably my favorite activity. Kind of missed that one. Being able to get the kids so excited, especially Grace (pseudonym). She was so excited about that. The counselors also referred to moments when their campers were influenced by watching other campers, as a conversation between the two counselors revealed:

Counselor-2: “The H2O activity when you told your kids, when you gave that competition between them, you know? About who can take the shorter shower. That affected my kids as well.”
Counselor-1: “Oh, really?”
Counselor-2: “Yeah, they were talking about that as well and they were even comparing each other's like how long was their showers the night before and stuff like that.”

Examples of observational learning and motivation for changing behaviors was observed throughout the two-week camp session. The counselors themselves reported feeling motivated to share their experiences with their family, as Counselor-1 shared,

I mean, I know for me and this is kind of a different perspective, but I've been talking to my mom about all of this stuff. What we have been doing when I go home and I even told her, I said, when we were on Wednesday or whatever because of the overnight, I said, ‘We need to get buckets again in our shower because we used to do that. We used to do that. We used to have the buckets. Mom, we need to do this,’ and so I think if I'm doing that I can imagine that my kids hopefully are doing that as well.
A variety of learning opportunities is beneficial for camper engagement.

The counselors recalled the learning benefits of having a variety of learning and activity opportunities available for the campers. Counselor-2 remembered how well the campers responded to activities that involved drawing, saying “Also, the pollinator activity. That was very ... It went well and they were able to draw once again. The kids loved to draw everything that they saw so that was great to put in here.” Counselor-1 recalled beneficial activities for the campers to practice the things they had learned, remembering,

the one where they had to look at the food labels, the pre-diabetes ones, I think that one was really interesting for them and then we actually today on our field trip, we were asked to look at a Heinz ketchup bottle and compare it to the ingredients that we made in our homemade ketchup and I could tell the kids were pulling the stuff that we had learned from that lesson.

Counselor-2 recalled enjoying the variety of lessons and topics they talked about, saying, the permaculture one was very intriguing because a lot of people haven't heard about that and it's like a tactic or a certain method of gardening and a lot of kids when they see a farm, they just see monocultures and when they see that and then they look at how permaculture works, it alters their thought of it which is very exciting.

Counselor-1 was surprised by the level of engagement from campers during a writing activity, stating that,

one of the hardest things was probably the fact that this is summer camp and they want it to be summer camp and not school and so I think you do get that
resistance of not wanting to write but then I was also so surprised because today, we did the writing the letter one and I thought that would be the one I would get the most resistance from and they were all doing it and especially after a very chaotic day.

Parents

A total of seven parents were interviewed for this study. Of the demographic information that was collected from the parents, all seven participants reported they were married with one to three children. There were five female participants, and two male participants. Six of the participants reported they are Caucasian, and one participant specified they are Hispanic. Three of the participants obtained a bachelor’s degree, and the other four received a master’s degree. Six of the seven participants are still working, and one of the seven is retired. The six participants who are still working all ranged within their early- to mid-forties, and the participant who is retired is in their late fifties.

All of the participants live in various suburbs of Atlanta, Georgia.

Table 2: Parents

<table>
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<tr>
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<th>Ethnicity</th>
<th>Career</th>
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<td>Male</td>
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<td>Retired</td>
<td>Yes</td>
</tr>
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<td>Parent-7</td>
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<td>Caucasian</td>
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Though information regarding household income was not collected through the interviews, the parents talked about themselves and the values they hold for their families. Comments about involvement in organizations, their past, their values, and current endeavors gave the researcher insight into who the participants are.
Participants shared their activity in environmental committees, their past experiences with 4-H, their current jobs as teachers, their active participation in volunteering at the Unity Garden and other organizations, and one participant even mentioned their membership in a lobbyist group in Washington D.C. that pushes for stronger anti-pesticide use. Participant-1 recollected her childhood experience as being an important part of how she raises her children, saying,

I was raised in my grandparent’s house in the summers in Mexico. They have all kinds of animals and they grew their own produce, so just kind of recreating my own childhood for them. I think that’s a really awesome experience that I want to do. I don’t have my grandparents still. I don’t have a farm. What I have here is things that I can sort of teach to them.

Whereas Participant-5 mentioned having always been concerned with sustainability, recalling “I think I’ve been this way forever. In college, friends used to tease me this way.” Some participants indicated frustrations they have with the consumptive lifestyles Americans lead, with Participant-7 indicating “I’m not religious about it or political in my approach to that, but I try to give them a sense of the world around them.” Other comments also gave the researcher an indication of their lifestyle, such as when Participant-6 mentioned “I think we’re pretty good. We’re pretty fortunate though, we have choices. We’re able to make those choices at this point. We have options and the economics of that aren’t too challenging for us.”

**Parent Interviews**

To gain a deeper understanding of the parents of campers, interviews were conducted concerning their thoughts on sustainability, the reason for enrolling their
children in the GROW Camp program, their perceptions on the role of parental involvement and family engagement, and their ideas concerning what an ideal camp program would include along with the best methods for transferring information from camp to the home. Seven themes arose from the interviews with parents, including: (1) importance of involving parents; (2) learning with children is beneficial for child development; (3) hands-on activities and experiential learning is critical; (4) parents’ interest in gardening and other information as a motivation for camp enrollment; (5) benefits of vicarious learning opportunities for parents; (6) importance of instilling values of sustainability in children; and (7) recipe book was successful tool in creating behavior changes. As part of collecting demographic information from the parents, the question “What does sustainability mean to you?” was asked of each parent. This question was asked to gain a better understanding of what each parent thinks and values about sustainable living.

When asked what sustainability meant to the participants, several common interpretations were echoed throughout the interviews regarding wise use of resources, with Parent-5 stating “I think it means the sweet spot of social, environmental, and economic benefits so that resources can be used in a way that is the most responsible and the most advantageous for the most people.” Whereas Parent-3 thought of sustainability as it related to consumer choices, saying “Choosing which products to buy based on is it organic? How was it grown? If it’s local. I guess, how you spend your money to care for the environment.” Parent-1 related sustainability to the way one lives at home, posing a question back to the researcher by asking,
what can we do on our own house to make it that we can be respectful of resources and promote that kind of environment where we are being respectful of all that we have and all the resources that we have. For example, are we using our rain water? Can we even collect that?

Another way of gaining insight into what participants thought of sustainability was to ask them to think about challenges they face in living sustainably. This way of questioning pushed the participants to think about sustainability in a different light, in a way that they would ideally live. Parent-1 said,

as far as being careful with our resources, this is our first time living in suburbia. I do find myself in the car a lot more than in the past. I would walk to school, use less resources. I do wish we had better walkways to get to school, which we would bike the way we used to bike before.

Parent-2 talked about how challenging it can be to eat and shop in a sustainable way, “It’s not readily accessible [a farmer’s market], so we do not…I have to pick the dirty dozen. Pick those out, make sure those are purchased locally or organically. I find it very challenging.” Parent-4 provided insight into her thoughts of how owning chickens is seen to be a more sustainable practice, “We’ve always wanted chickens, but where we live, we can’t.” To that extent, Parent-7 shared how he would love to produce more food for his family, saying,

I’ll tell you one thing I would like to do, that we haven’t gotten around to just because of the obligations of parenthood and everything else, is I’d love to have a garden in our yard. We don’t have one. With vegetables and things, that’s something I would love to do. Also, it would be an educational thing for the kids.
Importance of involving parents.

The participants stated they place importance on being involved in what their children are doing, with five of the seven participants indicating they had hoped to be invited to the Unity Garden to see what their children experienced and did during camp. Parent-1 said “I wish I was invited to go to the garden even if it was for five or ten minutes.” Whereas Parent-6 shared their thoughts on how to improve parental involvement:

Sometimes Adam (pseudonym) goes to some other camps and I really don’t know what’s going on. The information is limited. I don’t know what else could be provided unless they have one of those events where the parents and the kid are out there at the same time and the kids are showing what they’re doing, like those camp family nights or something.

Parent-2, whose child attended the camp session that did not receive the scrapbooks, mentioned wanting more information that could come home with her child in order to learn together, saying,

certainly, if the camp were to send websites home to reinforce it, that would be great for the parents. I think a hands-on book, maybe a picture book or something that they made that he could get excited and tell me about that I could learn from.

Parent-1 even mentioned wanting to be more involved with what was going on at Grow Camp for the purposes of extending the garden concept and drawing a connection to their child’s elementary school, mentioning,

there are a lot of volunteers at school. I would love to take what they’re doing at Chattahoochee to the elementary school. There’s no community garden. Replicate
what’s going on there and take that experience with him to school to make that soul connection.

Parent-3, who was a parent that did not receive a scrapbook, expressed wanting more information that could come home with her child in order to stay connected and become more involved with the material, stating,

I’m a very visual learner, If I can read it, I learn it… I guess I would say either have some kind of back up information available… It could even be, say we’re posting information on the website. To say, here is what we talked about today and some other sites you can review.

Parent-6 discussed wanting to be more informed about the day-to-day operations, expressing how he thinks the more informed he can be of what his son does during camp the better he would be able to engage his son when they were together, saying,

I think the schedules obviously help. They put that calendar out. I think for parents you’ve got that and I know the schedule, they don’t necessarily follow that all the time just based on circumstances but at least that gives us, ‘did you go and make that vegetable smoothie today?’ Oh, and then he’ll start talking about it. ‘Yeah, that was good.’

**Learning with children is beneficial for child development.**

This theme emerged as several comments were made concerning the level of personal growth children experience when parents are involved in what they are doing, as Parent-2 shared,

if you go and Google something and make it happen, it’s not as organic as if it comes from a place of learning, curiosity, and growth, personal. If he walks
through the door and he’s excited about airplanes, I want to go take him to watch the airplanes at the air field. We could Google and watch them on the video. That’s not the same thing. I just feel like if it comes from him, it’s about being organic. It’s about it being from a place of curiosity. When he walks in the door and has some project he wants to do, and he knows how to do it on his own, I think that gives kids, well at least my child, such a sense of self.

Parent-2 further emphasized her child’s growth and sense of self when she discussed the collaboration she has with her son, recalling,

we got planters and we got dirt and we did it on the back deck. We had potted tomatoes, strawberries. Even things that might not grow the best, he would say to me, ‘let’s just get them and try them.’ We did. We had cilantro and we had mint, all kinds of things. That was all him. He also planted a planter in the front of our house, full of beautiful things he felt like butterflies would be attracted to. Not only that, he used his own allowance money for one of the planters. He wanted it to be his.

Parent-6 shared his perspective on the role parents play as active participants in their children’s lives, and how their engagement will help solidify the things their children learn, saying,

I think the parents have to be engaged with it and just kind of ask questions. Instead they’re just sparked…Because sometimes the kids don’t know what’s really interesting, what’s really important versus anything else. Sometimes they’ll talk about what are you doing and what to do not necessarily what they did in the
garden that day and sometimes you just sort of have to ask them a leading question, ‘Did you do this? Oh yeah, we did do that.’

This comment was supported by a comment Parent-7 made concerning the long-term impacts of helping set a foundation at home:

I would say in terms of a longer term impact, because it’s been a month or however long it’s been, I would say that’s dependent on the parents. In other words, I think what you do with this camp is provide an opportunity. If the parents continue to talk about vegetables and focus on stuff and let the kid cook, then I think it becomes the foundation for something.

**Hands-on activities and experiential learning is critical.**

Parents referred to the benefit hands-on learning has on overall learning and development as well as the benefit of incorporating field trips into curriculum to help establish real-life connections to what their children are learning. Concerning hands-on experiences, Parent-2 said,

I think the best transfer for that, because the children would be the most excited about it, would be hands-on activities during camp. Then that created into some kind of hands-on activity that they make. They can then transfer that information over.

This idea of the benefits hands-on activities have was echoed by others, when Parent-7 shared,

I can tell you the most significant daily impact it had on him in the day to day, and I think after, was the sense of accomplishment from picking, growing, finding 25 worms in the compost. When he came out of that camp, unlike a lot of the
other camps we did this summer, I mean he enjoyed a number of them, but he really felt like he accomplished stuff, in a way that was really, really rewarding.

Parent-2 talked about the benefit for campers to become involved in their learning through hands-on activities, “It’s fun to get it when you see it in person, you touch it and you feel it. It’s much better to be explained that way.” Furthermore, the depth of this kind of learning was shared when Parent-5 discussed the difference she observed in the way her daughter was able to grasp concepts better from experiential learning as opposed to the conversations she has at home or at school, saying,

maybe I talked about them, or maybe she hears about them at school, but this was such a deeper dive and so much more of a hands-on demonstration of what it means and what the effects are and things like that.

Several parents mentioned the fact that the older campers had been able to go on a field trip to a local restaurant that specializes in locally grown food, as well as visit a food pantry which the campers had harvested vegetables the morning of the trip and were able to deliver the produce themselves and do a tour of the food pantry. Parents had talked about this opportunity being a great experience for their children, and the ones whose children were not old enough to attend mentioned how they wished the opportunity had been available for both age groups. For example, Parent-6 said,

so, this farm to table. I don’t know what the logistics are around that but I think the younger group, it would have been a good thing for them to do, just sort of close the loop on what the garden is doing.

Parent-5 also shared a comment about the special educational connection field trips make for their children, saying,
we love to go there to eat, and the handful of times that we’ve gone with the girls, they are so welcoming. They are really interactive and I think the idea of letting them see how it works in a commercial kitchen is just a really fabulous idea.

**Parents’ interest in gardening and other information as a motivation for camp enrollment.**

All seven participants expressed their interests in gardening as being the central motivation for enrolling their children in the GROW Camp program. Parent-5 mentioned, I said ‘you’ll get a chance to learn more about where food comes from and how to take care of the animals.’ She was really intrigued and we were too, about the idea that they would make snacks from the garden. It was mostly focused around the garden and food and the chickens. Parent-4 shared her thoughts on why she selected GROW Camp, indicating its unique setting and objective, saying “I liked the idea of working in the garden because we had never seen these in other programs.” Parent-3 shared that the reason for enrolling their child in GROW Camp was to support her child’s dreams, “I mostly focus on her because she’s interested in our garden and the one time this past year she was saying she wants to be a farmer when she grows up.” Comments regarding the reasons for signing their children up for GROW Camp also included benefits for themselves, as Parent-2 shared, “It was just basically up our alley, but I wanted him to be able to understand farm to table. Those were the important things for me.” Another parented shared their hope that they would have learned about gardening from their child, indicating their values for gardening and their belief in the ability of their child to teach them based on lessons and experiences they had at camp, saying,
I was hoping that he would come back with some knowledge of gardening, which
he did the first year. I truly do not have a green thumb, which is funny because
here I am wanting to eat these things, and I really want to learn how to do it.

A comment made by Parent-3 further supported this idea, “I told her hopefully you can
learn something that we can improve our garden with because I don’t have much
knowledge about growing food.” And again, Parent-5 made a comment about their
personal interest of gardening and animals, saying,

that was something I expected to hear more from. We don’t have any chickens
and never have. I told her I wanted her to go to the camp because I wanted to
learn and do more with the animals and the garden and everything.

Again, Parent-3 expressed concern about her own home garden and the opportunity she
expected would arise from enrolling her child in GROW Camp, saying “I’m assuming
there are more gardening practices than just keeping the weeds out and watering. That’s
all I know. I could have benefited from her learning those and I don’t even know what
they are.” Parent-2 talked about how she wanted to know more about composting,
sharing “Honestly, composting. I don’t know how to do it. I’ve Googled it. I’ve looked at
it. I’ve found the cheapest, easiest way. I would have loved for him to have found a home
grown way to do it.”

Benefits of vicarious learning opportunities for parents.

Parents discussed the active participation that came about from their children
bringing home ideas and excitement in doing and talking about the things they learned at
camp, and the benefits that has on creating opportunities for parents to become more
involved with them. Parent-6 shared his belief about shared motivation, saying that “all
the families that don’t do it, if their kids come home excited about it, it’s going to help the parents want to do it.” Parent-5 talked about an occasion when her child came home and actively engaged her parents in participating in an activity she learned at camp, saying,

one of the nights, I had to get the blender out, that’s when we made the popsicles, the smoothie pops because she insisted that we did that for dessert. We came home, did them, and then we ate them the next night for dessert because then they were frozen up. She was very excited about that.

Parent-5 continued her line of thought concerning the learning opportunities that could be shared among family members, stating how she loved the excitement her child expressed and suggested other ways of incorporating more engaging experiences for family, suggesting,

they could do something like interview five people in your family, or your neighbors, or call your Grandma and tell them something about pollinators. Those are the kinds of things, I think, when they have to engage with somebody else on the topic or share something they learn.

Parent-3 shared her belief on the difference her child can make in the lives of her family, by sharing a hypothetical situation:

If she came home saying that you shouldn't be using these chemicals in the garden because it's harmful we would listen to that. I mean, we already try not to, but, it would still make an impact and kind of remind you that your kids are going to be on the Earth longer than you are and you need to take care of it.
While Parent-7 talked about how learning together with your child is important in forming behaviors together, saying,

that you can actually implement everything together versus somebody just telling you this is the way. You know, we need to recycle, or we need to compost, or we need to think about other ways of doing things. If you can’t plant the seed of how can we do things and come up with... You just take more ownership. They become habits together.

And finally, Parent-3 mentioned the true power her child’s desire and motivation has on influencing family engagement and behaviors, saying,

gosh, I mean, I definitely think you can learn from your kids. I mean, you’re going to take it a little more seriously when it comes from your kids that say ‘Hey we should be doing this. Why don’t we do this?’ At least I would hear it differently and then you know it’s something your child is interested in and you would work harder to make it happen. If Elaine (pseudonym) came home and said ‘Daddy, what about this, you can get rain barrels and we can use the water to water your lawn or water plants’ I mean that would probably make him put the water barrel up faster than me saying it because you can see, you want to foster your child’s interest.

**Importance of instilling values of sustainability in children.**

Parents stated they place importance on instilling values of sustainability and environmental consciousness within their families, as Parent-3 commented,

I think it’s important they really understand where their food comes from and I love my kids to understand, to visit a farm where we get the grapes, to go see
where our water comes from because we have well water. To go and learn all of that. I think water would be a neat thing to learn about. How everything we do relates to the lakes and the rivers. How it comes down. I think that definitely has something to do with living.

Parent-6 reflected on his own values and what he wanted his child to understand, saying,

I think you know, they don’t need to take for granted that just because it worked this way this year it doesn’t always work that way next year…There’s a better way…It’s important that they at least have, at least at his age, just have a high level understanding of why you do it this way and not another way.

Parent-6 went on to add the value he holds for understanding the process of how people acquire food, saying,

I think I wanted him to learn, you know, what I had seen in the gardening operation and things that you do in that. I wanted him to get exposed to that and something that he may be interested in or this is how this grows, it’s just not on a store shelf.

While Parent-7 reiterated his value and desire for his children to think about other concepts of sustainability beyond the garden, “Something about the recycling that’s done at their home. You can have something like that, maybe where they can then talk to their parents about it in a non-annoying way.” Finally, Parent-5 made a comment concerning the power of the choices we make, stating,

I think making that extra connection too, and maybe they made it, to restaurants and how you eat out and what choices you make buying foods, you know that kind of thing. How it impacts what you do outside of your home.
Recipe book was successful tool in creating behavior changes.

All seven of the participants mentioned enjoying the recipe book their children brought home from camp. The recipe books were a part of the typical GROWCamp program, not related to the scrapbooks, but were integrated into the scrapbook as they related to the topics presented in the curriculum. Parent-5 shared,

she came home with a recipe book of things they made and so she really enjoys that and has made, on her own, made some things from the recipe book. Wanting to use good ingredients. That’s been a good change, too.

Parent-6 was impressed with how his son had been more willing to eat new vegetables, sharing,

he has branched out on trying new vegetables and has consistently been eating them. I think some of the recipe stuff they get at camp, where he tried something there and he translated it home where, you know I can cut up a bell pepper and something, stir fry it or garnish some food with it and he’ll eat it, whereas probably last year he wouldn’t have done that.

Not only were the recipes used, they also provoked deeper thought and conversation with parents, as Parent-4 mentioned “We went through the scrapbook. We looked at the recipes. Again with the food. The food was a big thing. We talked about buying the stuff to make the different recipes.”. Parent-3 talked about the level of engagement her daughter showed as a result of learning how to prepare food, saying,

she has shown more interest in cooking. We talk a lot about healthy snacks. I don’t know if that’s a new thing, it’s new for her to prepare them totally on her own. That was new and very nice for her to do.
Parent-4 described how her son was able to engage his father in some of the food activities, sharing,

we’ve done some smoothies since then. He’s recruited his dad into doing smoothies. They’ve explored some different ideas on their own, not using a recipe or anything. What do we have in the fridge? Let’s do that. That was good. He has helped cut up tomatoes. He learned how to cut tomatoes.

Parent-7 mentioned the increased engagement he had with his son through cooking, stating,

since then, one impact it’s done is he’s shown more of an interest in cooking, more of an interest in ingredients. It’s something he’s been interested in, but because he’s vocalizing it more consistently, he winds up helping out more.

Chapter Summary

This chapter highlighted the reoccurring patterns that were brought up in both the counselor interview and the interviews with parents concerning the benefit experiential learning opportunities have on creating rich learning experiences for campers. Parents expressed interest for sustainable agriculture and shared their values for engaging with their children at home and the potential for learning from their children’s’ experiences. Counselors mentioned the application of the scrapbook curriculum as a learning tool for their own development, as well as for providing pedagogical methods for delivering learning material to campers. The scrapbooks were not found to be widely utilized at home; however, they served to create more engaged learning opportunities for the campers and helped build the knowledge and confidence of the counselors, which helped strengthen relationships at camp.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The implementation of the sustainable-living curriculum was observed to provide engaging learning experiences for campers and helped promote more time spent learning in the garden. The scrapbooks also provided strong support for the camp counselors in becoming more confident and competent in creating opportunities for learning within the garden and capitalizing on teachable moments by allowing for more experiential learning of the curriculum that helped develop deeper, more meaningful educational experiences with the campers. Counselor efficaciousness was found to be an important aspect in the implementation processes of the curriculum in order to engage campers in learning and in facilitating experiential learning opportunities. Two research objectives were addressed from the counselor interview: research objective 1, describe how the counselors of the camp influenced the learning and engagement of campers related to the sustainable living curriculum throughout the camp program; and research objective 2, describe how the sustainable living scrapbook was utilized in the learning process at camp. In addition to addressing the research objectives, four themes arose that addressed the learning process as it relates to the tenets of Social Cognitive Theory and experiential learning practices.

The parent interviews shed light on the values parents have for learning about sustainable agriculture and environmental concepts, and more specifically, for learning
with their children. These interviews also revealed some limitations to the current study and helped further understand the specific educational needs adults have for learning and engaging with their children. Two research objectives were addressed in the parent interviews: research objective 3, examine how adult audiences were reached through an educational youth camp program regarding sustainability attended by their children; and research objective 4, identify the values parents of this study have for family engagement and learning with regard to their children’s educational camp experiences.

Conclusions

The interview with the camp counselors shed light on several benefits the scrapbooks provided during the camp program. The scrapbooks served as an educational tool for training the counselors in learning about agricultural and environmental sciences, as well as providing them with pedagogical methods of delivering the material to campers. Both counselors shared their beliefs that rich learning experiences, coupled with education, can stimulate learner engagement and can motivate children to share those concepts with their parents. Counselor-1 mentioned the importance the learning environment has on enriching the learning process, saying “I think the best way to do it is to really be in the garden incorporating, starting to talk about it before, or being wherever it’s going to take place.” This comment harkens back to the importance of the environment in the learning process, and helps provide understanding, from an educator’s standpoint, the value of being in a conducive learning environment to the material being delivered. The counselors also mentioned the increased level of engagement from the campers in the session that utilized the scrapbooks compared to other camp sessions that did not utilize the scrapbooks, claiming that the scrapbooks were a useful tool for
strengthening the depth of conversations and relationships between the counselors and campers. Through this deeper bond, the counselors were able to engage their campers more than they had during other camp sessions. The stronger connection to their campers allowed the counselors to act as role models for the campers and get to know them on a more meaningful level.

The counselors also observed the importance of promoting a sense of ownership in the campers for their scrapbooks and their learning. They mentioned that by allowing the children to work on their scrapbooks as much or as little as they wanted provided them the opportunity to direct their own learning. These comments help emphasize how a variety of learning opportunities and activities allows for different learning styles to be met and helps provide opportunities for more campers to become involved and engage with the material in a meaningful way.

While the scrapbooks were a useful tool in supporting the camp counselors and providing more experiential learning opportunities during camp, they were not reported to be widely shared among the parents of campers. This initially seemed to be a confounding phenomenon, in which several parents explicitly mentioned having wanted educational material, such as handouts or recommended websites, to be brought home from the camp their children attended; and yet, the majority of parents of children who utilized scrapbooks at camp did not report them to be an effective method for transferring educational content from camp to their homes. This contradiction of expressed interests and lack of utilization of additional learning material suggests there may be other more successful ways of delivering educational content that supports collaborative partnerships between youth and their parents. More information could be given to parents prior to the
camp program to inform them of the significance of the scrapbooks and provide clarity of the content within them. This was not done in the present study, as the researcher wanted to observe how parents of both camp populations would interact with their children, unprompted, in their natural setting and their natural form to help draw a deeper understanding of how parents regard the importance of being actively involved with their children’s education.

Interviews with the parents revealed several important ideas concerning the benefits of programs and activities that actively involve parents in youth camp programs and education. Parents also mentioned a significant motivation for enrolling their children in the Grow Camp program was to learn specific topics of interest from their children, indicating both the importance of understanding the needs of parents, as well as the belief parents have about the ability to effectively learn from their children. Monroe (2003) suggested that individuals seeking education to increase their own literacy of a subject are, in fact, viewed as exhibiting a certain behavior. The very act of seeking out information is itself a behavior; therefore, when evaluating behavior changes it is also important to evaluate the desire individuals have for acquiring new information. It is an intentional action to seek out and gain the information necessary to make behavior changes and further develop literacy and beliefs. These comments stressed the importance of identifying and including the parent’s interests and needs when designing educational programs. The values and beliefs of parents are important in designing programs for children because they will help inspire prolonged behavior and literacy changes at home and in the future.
Parents also reported having an assumption that the Grow Camp experience would inspire motivation for the child to share what they learned at home and would provide learning opportunities for which the family could be involved. Parents expressed how their child’s excitement and motivation to learn and be involved in certain activities is shared at home and has the ability to engage the family in certain activities. Bandura’s SCT posits that self-efficacy and self-regulation are integral in stimulating motivation for learning. Several parents expressed having had expectations to learn certain camp-related subjects from their children, indicating to the researcher that the parents held a belief about self-efficacy, that as children learn and become familiar and passionate about a subject their motivation to share those passions at home will also increase. The previous comments strongly suggest that when a child is excited and motivated to learn and act a certain way, that motivation directly transfers to the parents in such a compelling way as to inspire behavior changes. Parents mentioned the ability to learn and develop simultaneously with their children, forming new habits and new interests together.

The counselors and parents had different interactions with the campers and the scrapbooks, providing different perspectives of motivation, learning, and engagement. The counselors and parents both expressed the importance of the environment being integral for learning about agricultural and environmental sciences, claiming that the experience of being involved with the environment while learning about it helps create more substantial learning experiences. The counselors suggested that allowing the campers to engage with the scrapbooks in their own way created meaningful space for the children to express themselves and learn as individuals. The counselors also commented on the shared excitement between the campers during activities, and the ability of that
excitement to motivate the campers, as well as the counselors, to be more involved with one another. These findings support the tenets of the triadic reciprocality of SCT, where the environment, the individual, and the behaviors of others are in constant play and influence one another in the learning process. The findings also helped inform the researcher of potential recommendations for environmental education practitioners.

**Recommendations**

It is recommended that continued research on the factors that influence and promote family engagement of youth and adults focus on avenues of the successful diffusion of programmatic innovations. Practitioners in the field of environmental and agricultural education should consider providing opportunities for youth and adults to learn together through educational programming. This can be accomplished through various means of collaboration, either in the learning environment or through shared educational material that meets the needs of both youth and adults. The comments made by parents concerning the importance including them in their child’s camp experience and providing them more information on the topics their children learn about emphasizes their value in learning and engaging with their children. The comments parents shared in reference to the recipe books from camp indicated the importance they place on being involved in supporting healthy, nutritional behaviors. The comments also demonstrated how the recipe books were used at home to create a bonding experience for parents and their children, as parents are typically the ones responsible for family nutrition, this engagement further highlights the transition children make into adolescence and adulthood. Practitioners may benefit from directly incorporating parental involvement, such as offering volunteer opportunities and direct participation in camp activities, or
through promoting activities that can be done at home as a part of extending the camp experience and education to the parents. Gaining a better understanding of parents’ interests as well as their demographics is important to help draw a more complete picture of the level of attention, financial ability, values, and education the parents have, all of which are indications of their overall socioeconomic status (SES), which directly influences the quality and probability of parental involvement in the learning process. Understanding how the parents perceive sustainability and the challenges they face in living sustainably helps draw a better understanding of how to communicate sustainability to parents, and how to provide opportunities in learning and behaving more sustainably.

Program curriculum designed for agricultural and environmental sciences, particularly within camp environments, should consider providing a variety of material and activities that appeals to different learning styles in order to effectively reach campers with varying needs and preferences. The findings from the counselor interview also shed light on the important role camp counselors play in effectively teaching material and engaging campers. The findings of this study indicated that the camp counselors felt more confident in their ability to teach and interact with their campers, and attributed their increased self-efficacy to having used the scrapbooks as a tool for learning and delivering lessons in the garden. Future research on camp programs may benefit from focusing more attention on the specific qualities camp counselors have or display that are effective in engaging campers, and to what degree their role influences the learning process.
Limitations to the Study

Possible limitations to this study may have arisen from the population of participants, who all had previous knowledge and perceptions of sustainability and expressed the values they held of sending their children to a camp in which they would continue to learn about sustainability. The participant population shared similar demographic elements, which may have also limited the findings of this study. The study location was in a suburb of Atlanta, whose population average income and education levels place the majority of residents within the middle to high SES category. Therefore, the camp, the participants, and the results of this study are all specific to this research and the findings should not be generalized among other populations. However, this study may be used to provide preliminary information for agricultural and environmental educators seeking to foster more parental involvement in the learning process.

Summary

The collaboration between youth and adults has been shown to be a valuable relationship for the continued development of both youth and adults. Partnerships between camp counselors and campers played a critical role in the depth of learning and interaction in the present study. Camp counselors can serve as positive role models for campers, and the stronger the relationships are between the campers and the counselors, the more enriched the learning environment becomes. Fostering stronger partnerships between youth and adults, particularly within families, can be beneficial in promoting behavior changes in the home. Future research should focus on two key areas: the elements of the camp counselors that influence the learning process and camp experience; and effective methods for engaging parents and guardians in their children’s’ learning.
REFERENCES


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WELCOME/GROUP PROCESS & PURPOSE (5 minutes)

Moderator reads: Hello and welcome to our group interview. Thank you for taking time to join our discussion today. My name is Emily and I will be moderating this session. You have been invited here today because I am interested in having a general discussion with you about the use of supplemental adult learning material that coincides with the Grow Camp program content. I am very interested in knowing what you think.

My role here is to ask questions and listen. I won’t be participating in the conversation. Please feel free to share your point of view even if it differs from what others have said. There is no right or wrong answer for these questions. All of your thoughts and opinions are important to me. Please speak up and only one person should talk at a time. I’ll be asking questions, and I’ll be moving the discussion from one question to the next.

I welcome all opinions and will keep them confidential, so please feel free to say what you think. Additionally, I encourage you to keep this discussion confidential. However, I cannot guarantee that you will do so. There is no particular order for the responses, and there are no correct/incorrect answers to any of the questions. This session will be recorded so that I am able to consider your views later. For the sake of clarity, please speak one at a time and be sure to speak loudly and clearly so that my recorders can pick up your comments.

For this discussion, we will be on a first-name basis, but in my later reports there will not be any names attached to comments. You may be assured of confidentiality.
Our discussion will last about one hour. If you have your cell phone with you, I would appreciate it if you could turn it off while we are in the discussion unless you are unable to do so.

I hope that both of you will feel comfortable with the process, and will feel free to share your opinions as we proceed. If you did not fill out a consent form, please do so before we begin our discussion. Are there any questions before we begin?

**Icebreaker & Introductions (5 minutes):** Introduce yourselves and tell us what age group you worked with this summer, and your most memorable moment from the two-week camp session this summer.

**Scrapbook Delivery, Content, and Significance Interview Questions (40 minutes)**

Thanks for sharing those camp memories. I’d now like to ask you some questions about the scrapbooks you worked on with the campers. I’d like to know your thoughts about taking time each day to deliver information and help the campers learn and work.

In your opinion, what was the general attitude from campers in taking time each day to work on their scrapbooks?
- Did their level of interest change over the course of camp?
- What were some things you did you help create interest in the scrapbooks?
- Which topics were most interesting to the campers? Why?
- Which topics were least interesting to the campers? Why?

If you could change one thing about the way you delivered the material, what would it be?
- When is the best time to work on something like this?
- Do you think it’s important to have an understanding of the material being delivered?
- What did you do to prepare for working on the scrapbooks with the campers each day?

What were some of the specific challenges the campers experienced in following your prompts for working on their scrapbooks?
- What do you think are the big contributors to those being challenges?
- What were some ways you overcame these challenges?

I really appreciate you sharing your thoughts on the delivery of the scrapbooks. Now, I’d really like to know more about your thoughts on the content of the scrapbooks.

Do you think the campers were able to relate to the material that was in their scrapbooks?
- Were you able to make connections for the campers to what they were learning?
What were some of the connections you made that seemed to work well?
Would you have changed any of the topics to better relate to the Grow Camp curriculum?
  - What would those topics have been?

If you could change one thing about the scrapbooks, what would it be?
  - Would you change the format of the scrapbooks?
  - Would you change the content of the materials?

Please explain whether or not the use of the scrapbook at camp was helpful to you as a counselor.
  - How could you make it a more useful tool as a counselor?
  - What did you learn or gain from reading, discussing, and doing the lessons and/or activities from the scrapbooks?

That’s great feedback on the scrapbook content. To finish up, I’d love to know what you think the significance is of creating something that serves as a connection between the campers and their parents/guardians.

What do you think the importance is of creating a connection between what the campers are learning about at camp to the learning material their parents/guardians will receive?
  - What impact do you think this kind of information sharing has on the parents/guardians?
  - What impact does it have on the campers?
  - Do you think having a scrapbook, such as the one you worked with, helps create a connection between parents/guardians and their child/children?
  - Do you think you will try to create that kind of connection in the future for campers and their parents/guardians?

CONCLUDING STATEMENT (10 minutes)

As was explained at the beginning of the session, the purpose of this interview was to get your feedback and opinions about using informational scrapbooks in the Grow Camp program as a tool for delivering meaningful and educational material to the parents/guardians of campers. Your comments today will be useful in evaluating the impacts a program like this can have on adult’s knowledge, attitudes, and behaviors toward sustainable agriculture, good nutrition, and community wellness. Your comments will be useful in designing more effective methods of delivering meaningful educational material in an effort to better connect children to their parents/guardians. Have we missed anything or are there any other comments at this time?

Thank you for taking time out of your day to share your opinions. Your participation is greatly appreciated and has provided valuable insight into this topic.
APPENDIX B

PILOT FOCUS GROUP MODERATOR’S GUIDE

University of Georgia/College of Agricultural and Environmental Sciences/Department of Agricultural Leadership, Education, and Communication

FOCUS GROUP MODERATOR’S GUIDE

FOCUS GROUP DISCUSSION—Pilot Program Participants

PILOT PROGRAM IMPACTS

Location: Chattahoochee Nature Center
Date: August 5, 2015

WELCOME/GROUP PROCESS & PURPOSE (5 minutes)

Hello and welcome to our focus group discussion. Thank you for taking time to join our discussion today. My name is Emily and I will be moderating this session. This is Anita and she is my assistant moderator. She will be in charge of taking notes during the interview. You have been invited here today because we are interested in having a general discussion with you about the impacts the Grow Camp program your child/children attended had on the level of personal and family engagement you have regarding sustainable living practices. We are very interested in knowing what you think.

My role here is to ask questions and listen. I won’t be participating in the conversation. Please feel free to share your point of view even if it differs from what others have said. There is no right or wrong answer for these questions. All of your thoughts and opinions are important to us. Please speak up and only one person should talk at a time. Also, please make sure you share your comments and thoughts with the entire group and avoid side conversations with the other participants. I’ll be asking questions, and I’ll be moving the discussion from one question to the next. Sometimes there is a tendency in these discussions for some people to talk a lot and some people not to say much. But it is important for us to hear from each of you today because you have different experiences. So if one of you is sharing a lot, I may ask you to let others respond. And if you aren’t saying much, I may ask for your opinion.

We welcome all opinions and will keep them confidential, so please feel free to say what you think. Additionally, we encourage you all to keep this discussion confidential. However, we cannot guarantee that you all will do so. There is no particular order for the responses, and there are no correct/incorrect answers to any of the questions. This session will be recorded so that we are able to consider your views later. For the sake of
clarity, please speak one at a time and be sure to speak loudly and clearly so that our recorders can pick up your comments.

For this discussion, we will be on a first-name basis, but in our later reports there will not be any names attached to comments. You may be assured of confidentiality.

Our discussion will last about two hours, and includes a 10-minute break. If you have your cell phones with you, we would appreciate it if you could turn it off while we are in the discussion unless you are unable to do so.

I hope that everyone will feel comfortable with the process, and will feel free to share their opinions as we proceed. If you did not fill out a consent form, please see Anita and complete this form before we begin our discussion. Are there any questions before we begin?

**ICEBREAKER/GROUP INTRODUCTIONS (10 minutes)**

Let’s find out some more about each other by going around the room one at a time. Tell us your name and your favorite family activity.

Now that everyone has been introduced, let’s begin with an activity.

**Sustainable Living Importance Rating Activity & Discussion (45 minutes)**

*Note: This is to gauge the level of importance of the scrapbook topics for each participant. We will be looking for the three most and least important topics for each participant. The discussion that will stem from this activity is to gauge the initial thoughts of participants on what sustainability is to them and how, if at all, the scrapbooks have had an impact on their knowledge, attitudes, or behaviors.*

Distribute stacks of flashcards to participants.

To begin, you have been given a stack of notecards, each has a picture and description that matches each one of the handouts that was in the scrapbooks you received from your child’s Grow Camp experience. Look at each notecard and pull out the three topics that are most important to you.

Let’s go around the table and please share your three most important topics and say why they are the most important for you.

**Collect the three most important notecards from each participant. Clip each stack together for each participant.**
Okay, now that we have talked about the three most important topics to you, look at the
stack again and pull out the three topics that are the least important to you.

Again, let’s go around the table and please share your three least important topics and say
why they are the least important for you.

Collect the three least important notecards from each participant. Clip each stack
together for each participant.

Building off our activity, let’s talk about your thoughts and beliefs about what
sustainability is.

• What does sustainability mean to you?
  o What challenges do you face in living sustainably, as it relates to your
    understanding?
  o Temperature check: I want to present a hypothetical scenario to you.
    Imagine you are approached one day by someone who was really upset
    and questioning you about what you and your family are doing and this
    person says to you that sustainability is just a catch-phrase, and is a bunch
    of hippie-dippie, tree-hugging bologna, that it doesn’t make a difference
    and that it interferes with industry and growth. What would your response
    be to this person?

• What did you learn or gain from the scrapbook that has changed your knowledge
  or beliefs about sustainability, or been thought provoking at the least?
  o How have the scrapbooks had an impact on the way you interact with your
    family concerning sustainability?
    ▪ Now that you’re child went to camp and has brought this
      scrapbook home, what has changed, if anything?
  o How was the camp experience your child or children had enriched by
    working on and bringing home a scrapbook about sustainability?
  o In general, how have the scrapbooks had a positive impact on your
    family’s life?

Thank you for talking with us about your thoughts and beliefs about sustainability. Now,
let’s take a ten-minute break and meet back here after the break. BREAK (10 minutes)
Needs Assessment Discussion (40 minutes)
*Note: This activity and discussion is to gain insight into some of the barriers participants had in reading, understanding, or participating with the lessons and activities presented in the scrapbooks. This is also an attempt to draw out some challenges they perceive in being able to “live sustainably”.

Distribute half sheets of paper to each participant.

Welcome back everyone, before the break we talked about what sustainability meant to each of you and how the scrapbooks have impacted you and your family’s lives. Now, I want to talk with you about some challenges you face with this concept of “living sustainably”.

I want you to think about some of the concepts or activities you saw in the scrapbook that present challenges to you in understanding, agreeing with, or accomplishing.

On the half sheet of paper in front of you, write down a few thoughts you have on some of the lessons and activities you saw in the scrapbooks that are difficult for you to understand, agree with, or participate in. If you had negative feelings about something you saw, please express that in writing on your paper.

Now, let’s go around the table and share what you’ve written and share why you feel the way you do about what you’ve written.

• What would you need to be able to better understand the concepts from the scrapbook?

• What would you need to be able to better participate in the activities and challenges presented to you in the scrapbooks?

• How else might information like what is in the scrapbooks be delivered?
  o Is it valuable to you that you received this scrapbook from your child or children?

Thank you for all your great feedback on the concepts presented in the scrapbooks on living sustainably. Would you all please pass in your papers? Collect half sheets from each participant.

CONCLUDING STATEMENT (10 minutes)

As was explained at the beginning of the session, the purpose of this interview was to get your feedback and opinions about the impacts the Grow Camp program your
child/children attended had on the level of personal and family engagement you have regarding sustainable living practices. Your comments today will be useful in developing and implementing supplemental learning materials for the purpose of engaging adults and families concerning sustainable agriculture, good nutrition, and community wellness.

Have we missed anything or are there any other comments at this time?

Thank you for taking time out of your day to share your opinions. Your participation is greatly appreciated and has provided valuable insight into this topic.
WELCOME & PURPOSE (5 minutes)

Hello and thank you for taking time to share your thoughts today. My name is Emily and I will be moderating this interview. You have been asked to participate in this interview because I’m interested in having a general discussion with you about your thoughts and experiences with the Grow Camp program and your level of personal and family engagement with sustainable living practices. I am very interested in knowing what you think.

My role is to ask questions and listen, please feel free to share your point of view openly; as there is no right or wrong answer for these questions. All of your thoughts and opinions are important to me.

I welcome all opinions and will keep them confidential, so please feel free to say what you think. This session will be recorded so that I am able to consider your views later. For the sake of clarity, please be sure to speak loudly and clearly so that my recorder can pick up your comments.

For this discussion, we will be on a first-name basis, but in my later reports there will not be any names attached to comments. You may be assured of confidentiality.

Our discussion will last about thirty minutes.

I hope that you will feel comfortable with the process, and will feel free to share your opinions as we proceed. Do you have any questions before we begin?

To begin I’d like to know, what does sustainability mean to you?

○ How do you teach your children about sustainability?
o What do you do to live in a sustainable way?

o What challenges do you face in living sustainably, as it relates to your understanding?

Now, I want to talk with you about your thoughts on the experience your child or children had at Grow Camp.

o Why Grow Camp?

o What were your expectations?

o Tell me how they were met or not met.

I want you to think about their experience and some of the things they may have talked about.

o What are a few things your child/children talked about before going to Grow Camp, what were their thoughts or feelings about going to camp and what they expected to learn or do.

o Now that their camp experience is over, what have you observed in them, related to sustainability?

o What is so special about your child’s participation in Grow Camp, as opposed to other camps?

o How have you learned, if at all, about sustainability through your child’s camp experience?
  ▪ Anything new or thought provoking about what they talked about?
  ▪ How have you and your family been impacted by the things they learned?
  ▪ What kind of changes, if any, have you made at home regarding sustainability?

Do you think you would be more engaged with your child/children regarding the things they learned at Grow Camp if you had received some kind of additional information?

o What should it include?
Do you think the camp experience your child or children had would have been enriched by receiving additional information?

How important do you think it is to learn about and participate in the things your child/children are learning about?

CONCLUDING STATEMENT (10 minutes)

As was explained at the beginning of the session, the purpose of this interview was to get your feedback and opinions about your thoughts and experiences with the Grow Camp program your child/children attended and the level of personal and family engagement you have with sustainable living practices. Your comments today will be useful in developing and implementing supplemental learning materials for the purpose of engaging adults and families concerning sustainable agriculture, good nutrition, and community wellness.

Have we missed anything or are there any other comments at this time?

Thank you for taking time out of your day to share your opinions. Your participation is greatly appreciated and has provided valuable insight into this topic.
COUNSELOR GUIDE FOR MATERIALS

Counselors Guide for Delivering Scrapbook Materials

**General Information:**

Each camper will receive a 3-ringed notebook the first day of camp. Think of and reference the notebooks as the camper's scrapbooks. Talk about the scrapbooks in a way that makes the campers feel that each one will be unique and will eventually be given as a special gift to their parents/guardians at the end of camp. One suggestion is to let the campers know they are going to be teaching their parents this information, and help them understand the profound impact they will have on their parents. Campers are invited to draw a “cover page” which can be put in the front sleeve of the notebook. All decorative and program materials (notebooks, paper, coloring pens, etc.) will be provided by the program evaluators (Dr. Holt and Emily Cabrera).

Each day of camp, allow about 30 minutes to work with campers on the handout that corresponds to that day's camp lesson. Involvement from the campers is completely voluntary, but if you could encourage them to engage with the scrapbook it will help create a sense of ownership and pride for the scrapbooks, and will be a special learning tool for their parents.

Give the campers between 15 and 30 minutes to interact with their scrapbooks. Please make sure to follow the prompts provided below for each activity. The campers are encouraged to personalize their scrapbooks; they can decorate them, put souvenirs in the sleeves, write journal reflections, etc. When the campers are done, or when you need to wrap up, please have the campers neatly set their scrapbooks in a designated place for the rest of the day.

On the last day of camp, campers will have a special memento and teaching tool to take home to share with their parents!

**Counselor Prompts for Handouts**

Please use the following prompts to engage campers with the scrapbook materials:

- Sustainable Yard, Sustainable You (Life Cycles camp lesson):
• Have campers think about the different plants they see on the second page. Did they see any of these at camp? Have they ever seen the other plants in nature? Ask them to focus on one thing around the garden (a tree, a plant, the garden itself, a bird house, etc.). On the blank page provided, ask them to draw or write about their focus item. Ask them to jot notes about what they see and things they hear around them (birds, insects, the wind). This is to get them to start looking at and thinking about their surroundings and what they find naturally occurring. They are welcome to glue items onto their reflection page if there is time.

• What’s Composting All About? (Soil Science camp lesson):
  o Ask campers to write down three interesting facts they’ve learned at camp about worms or composting processes on the blank page provided. What did they find in the compost pile? What did they add or not add to the compost? Why? They can draw pictures if they’d like.

• Cooking with Herbs (Healing Herbs camp lesson):
  o On the blank page provided, have campers draw their ideal garden, or write about it. Ask them to label the plants they’ve drawn or talk about facts they’ve learned about the plants. How do some plants smell or feel? How could they prevent pests from spreading in their garden? What kinds of herbs would they like to have? Vegetables? Flowers? They can glue items on their page as well.

• Pollinators Abound! (Insect Friends & Enemies camp lesson):
  o Ask campers to draw or write about a pollinator they’ve learned about in the space provided on the activity sheet. What interesting fact did they learn about this pollinator? What kinds of plants is the pollinator attracted to? Does it have natural enemies?

• Eat, Think, Be Local (Seasonality camp lesson):
  o Ask campers to think about the vegetables that are growing in the garden at camp. In the space provided on the front page, ask them to write about what they saw growing in the garden and any cool facts they learned about them. What is missing? When will it come in season? Help them brainstorm some for this.

• What’s on the Plate? (Plant Families camp lesson):
  o On the handout, help campers add two or more plants to each family. If they have extra time, they can write down what their favorite meal is and start listing the ingredients for the meal. Can they figure out which plant family the ingredients belong to?
    ▪ Nightshade: tomatoes, peppers
    ▪ Cucurbits: squash, cucumber
- Legumes: peas, peanuts
- Brassicas: cauliflower, broccoli
- Allium: onion, garlic
- Umbellifers: celery, carrot
- Beetroot: beets, spinach
- Mint: mint, lemon balm
- Grains & Grasses: wheat, rice

- Energy In, Energy Out (Wily Weeds camp lesson):
  - As you are weeding the garden, ask campers to keep one or two weeds they pull. On the blank paper provided, have campers press and tape their weeds on the page and make notes about the observations they made while weeding. Were there lots of the same kinds of weeds growing? Are they growing in full sun or hiding under plants? Do they have flowers?

- Gotta Have That H2O! (Water camp lesson):
  - Talk with campers about water issues and conservation practices they can do at school, at home, at camp, etc. Help them think of three additional challenges to add to the Be Proactive Challenge.

- Pre-diabetes (Counselors can choose which day to deliver):
  - Look at the food label with the campers. Have they ever read a food label? Why is it important to know what is in the food they eat? Ask them to write down their favorite snack, and when they go home they can start to investigate the food labels of the things they eat. The idea is that the parents will help them fill out the food label items when they receive the scrapbook.

- Hunger in America (Food Systems camp lesson):
  - On the blank page provided, ask campers to start writing a letter about their thoughts on hunger in Georgia that they would possibly give to a senator or congressman. Ask them to think of why this issue is important to them and ways they can help, ways their local government could help, and what differences they think we could all make if we worked together to end hunger. They can draw pictures in their letters as well or talk about experiences they've had at camp or volunteering in the past.
Ever notice how locally grown food seems to taste better than food at the grocery store? That’s probably because local foods are much more fresh!

Foods grown and processed locally are typically in season, so they taste better because they are allowed to ripen on the vine or tree as they are intended to, and are sent to market at their peak for flavor and freshness.

Local markets help reduce the miles food must travel to reach consumers, thereby providing benefits to not only the producers and consumers, but to the environment as well. Reducing food miles also helps ensure better food safety by decreasing chances of contamination and spoilage.

Shopping at local markets helps stimulate local economies and invigorate communities. Markets are a great way to socialize and learn about what’s in season.

Can’t make it to a market every week? Try joining a local Community Supported Agriculture (CSA) program. You can pay by the week or month for a share of crops harvested weekly from local farms.
BE LOCAL CHALLENGE!

Log how many times your family shops at a farmer’s market each month. Set a goal as a family and try to uphold it each month.

Try to attend new markets around town, some markets are held on different days throughout the week. Make a list of all the markets you’ve attended and write notes about the things you did there or what you liked about the market.

Make sure to visit at least three vendors at each market, it’s good practice to share your support.

While you’re at the market, try to engage in conversation with different farmers and vendors, as well as other community members!

Look for new foods to try, and ask around for information on growing, preparing, and cooking the new vegetables.

**Some Metro-Atlanta Markets You Might Want to Visit**

Look up other Markets online and add them to your list!
Cooking with Herbs

Cooking with herbs can be a delicious way of adding natural flavor to your meals, and can help you reduce the use of salt. Too much salt in your diet can increase blood pressure and can be bad for the heart. Herbs provide additional health benefits, considering they are full of vitamins and nutrients and contain many different healing properties!

Dill: contains iron and calcium

Cilantro: contain iron and fiber

Basil: used as an anti-inflammatory

Parsley: contains Vitamins K, C, A and folate

Oregano: contains antibacterial and antifungal properties

Chives: contains fiber, Vitamin A, Vitamin B's, and several anti-oxidants

Rosemary: contains fiber, iron, and calcium. Increases circulation & digestion

Mint: contains potassium, calcium, iron. Helps relieve stress, fatigue and tummy aches

Lavender: helps with relaxation and is used to relieve headaches. Is also an anti-inflammatory

Lemon Balm: used to relieve tension and sleeplessness, good for digestion, and lowering fever

Stevia: is primarily used as a natural sweetener (no calories and is about 40 times sweeter than sugar!)
Make a Recycled Herb Garden!

Start cleaning & saving your canned-goods cans throughout the week.

Make sure you file down any sharp edges.

Use a can opener, or a screwdriver and a hammer, to punch a few holes in the bottom of the cans for drainage.

Add a few small rocks first to help with drainage.

Find a potting mix at a local retailer, and keep some extra lying around in case you need to replant or expand your herb garden throughout the year.

If you’re not familiar with cooking with herbs, start with planting some basic ingredients you’ve probably tried before. Some common herbs are basil, rosemary, parsley, oregano, chives, dill, cilantro, and mint.

Fill the cans about half to ¾ the way to the top of the can, place your plants in the soil and fill the rest of the way up. Don’t pack too tight!

Water well and put in a sunny spot. Keep an eye out for too much sun, as the herbs may dry out faster!

Eat them fresh, or hang upside down to dry for storage and cooking throughout the year!
Participating in physical activities as a family is not just a good way to stay healthy, but it’s also a great way to strengthen family bonds!

Leading a healthy lifestyle means that you’re making good decisions about the food you eat, but it also means that you’re making good decisions about how to stay active. The food (energy) we consume needs to be used (burned) through physical activities. Excess energy that is not used is stored in the body and can eventually turn into unnecessary fat. Remember—energy in, energy out!

Finding ways of getting enough exercise into your day may seem difficult, but you don’t have to go to the gym to stay fit!

Families that play together stay fit together. As children grow into adulthood, they oftentimes make decisions based on learned behaviors from their youth.

Yard work and gardening are great ways of spending time outdoors, getting physical activity, and working together as a family to make something beautiful. Don’t have a yard or garden? Look for a community garden within your area and volunteer, as a family, to help at the garden on the weekends!
Those Wily Weeds!

Weeds have very effective evolutionary strategies for survival – many can grow fast, tolerate tough conditions, reproduce quickly and produce huge amounts of seeds that can remain dormant in the soil for long periods of time! Whew!

Because weeds are so good at growing, they often outcompete food crops for sun, water, and nutrients.

One of the best ways to get rid of weeds is to pull them! Pulling weeds helps you get to know your land and your soil. Because weeds are plants too, they need special growing conditions, nutrients, and display particular characteristics that you can predict year after year.

A good farmer always makes good observations and takes good notes. Start to make observations about which weeds grow in your yard or garden. What do they look like? Can you identify them? Do they attract certain harmful or beneficial insects? Do they possibly provide any benefits to you or other animals and insects?
You probably don't think much about water even though you use it every day.

There's a lot of water on our planet, but we can only use a small amount of it. Water covers about 70 percent of the earth, but only about three percent of it is fresh water. Most of the fresh water, about 75 percent, is in the form of ice. The demand for unpolluted fresh water is increasing because the earth's population is increasing.

There are many ways that we can help protect and conserve our precious water supply, and it starts with understanding the hydrologic cycle, and the part we play within that cycle.

When water from rain and melting snow runs off roofs and roads into our rivers, it picks up toxic chemicals, dirt and trash along the way. Many of our water resources lack basic protections, making them vulnerable to pollution from unsustainable recreational, agricultural and industrial practices. This can lead to drinking water contamination and habitat degradation.

- **Topsoil** (rich in nutrients) can take hundreds of years to form naturally, and bad farming practices allow it to wash away (**erode**) in heavy rains.
- **Fertilizer run-off** can cause **harmful algal blooms**, which lead to **fish kills** and can harm an entire aquatic ecosystem.
Be Proactive About Your Role!

Did you know?...

- An average household uses 260 gallons of water a day!
- It takes 15 to 30 gallons to take a bath.
- Older toilets use 3.5 gallons per flush.
- 30% of all water consumed each day is spent on outdoor use.
- It takes five gallons for a one-minute shower.
- One drip every second from a leak adds up to five gallons a day!

The Be Proactive Challenge

Each week, try to accomplish one of the following water conservation challenges listed. Place a check mark in the column next to each new item you accomplish. These are ongoing challenges, so keep up the good work and challenge a friend, neighbor, or family member too!

<table>
<thead>
<tr>
<th>Challenge Item</th>
<th>Completed</th>
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<tbody>
<tr>
<td>Reduce shower time by 2 minutes</td>
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<tr>
<td>Check &amp; replace all faucets with low-flow heads</td>
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<td>Locate your master water shut-off valve</td>
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<td>Be a leak detective, check for and fix all leaky faucets</td>
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<td>Collect rainwater from house gutters with rain barrels</td>
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<td>Showers are no longer than 5 minutes</td>
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<td>Designate one glass for drinking water for the day</td>
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<td>Mulch around plants, this conserves water &amp; reduces weeds</td>
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<td>Water outdoor plants only in the mornings while it’s coolest</td>
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<tr>
<td>Run the dishwasher only when it’s full</td>
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<tr>
<td>Plant species native to your region</td>
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<tr>
<td>While you wait for your shower water to warm up, collect the water in a bucket and use to water your plants later</td>
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Create Your Own Challenge Items Here!

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Hunger is...

- Lack of calories, protein, and micronutrients (vitamins & minerals). Hunger can be categorized as malnutrition, which can be either over- or under-nutrition. Hunger is oftentimes referred to as food insecurity, which is a condition of hunger that results from lack of access to nutritional foods.
- In Georgia, **1 in 5** people struggles with hunger!
- Hunger and poverty go hand-in-hand. Access to nutritional foods is much more difficult for people of lower income families who receive most of their nutrition from processed foods that are high in sugars, salts, and fats.
- Proper nutrition is vital for healthy development in children.
- Hunger is present in every community in the nation:
  - 52% of high food-insecurity rate counties are rural
  - 24% of high food-insecurity rate counties are urban
So, What Can You Do?

VOLUNTEER! Individually or as a family:
- At a local food bank or kitchen
- Tutoring kids at your local Kids Café
- Growing and donating food when you are able to
- Donating canned and dried goods to local food pantries

And...Never underestimate the power and right you have as an individual to contact your State Senators and Congressmen! Express your concern with hunger in GA and the U.S. Ask for your local government to invest in hunger relief programs and policies to help end hunger in your state!
Did you know:
In 2007 the U.S. Senate designated a National Pollinator Week! National Pollinator Week for 2015 was June 15 through June 21.

Over 75% of all flowering plants and nearly 75% of our crops are pollinated by animals, bugs, and insects!

Some of the challenges that both native pollinators and honey bees face include lack of diverse and nutritious pollen and nectar sources due to habitat loss and harmful interactions with various pesticides, which weaken their immune system and make them more susceptible to pathogens and parasites.

Whether you live in an apartment or on a 20-acre piece of land, you can create a Certified Wildlife Habitat! Check the National Wildlife Federation’s qualification standards today! Follow this link to learn more about creating certified pollinator and wildlife habitat in your own yard: http://www.nwf.org/
Bee a Friend, Plant a Pollinator Garden!

Pollinator gardens are easy and fun to plant. You will not only beautify your lawn or garden, but you will provide habitat and essential nutrients for our pollinator friends!

Gardens Tips:

Use a variety of plants and flowers that bloom from early spring to late fall – Flower color significance depends on the specific pollinator. For instance, bees are attracted to bright blue and violet colors. Hummingbirds prefer red, pink, fuchsia or purple flowers. Butterflies enjoy bright colors such as yellow, orange, pink and red.

Night-blooming flowers take advantage of pollinators active at night, like moths and bats. Since they don’t see colors, these flowers are not as colorful. Instead, the flower’s fragrance attracts these pollinators.

Eliminate pesticides whenever possible – If you must use them, read the labels carefully, use the least toxic chemicals and try spraying just before dark when pollinators are less active.

Don’t have a lot of space for a garden? The possibilities are endless!
Prediabetes

Prediabetes is when your blood sugar level is higher than normal but not yet high enough to be classified as type 2 diabetes.

Without intervention, prediabetes is likely to become type 2 diabetes in 10 years or less. If you have prediabetes, the long-term damage may already be starting.

But, there's good news! Prediabetes can be an opportunity for you to help improve your health! Progression from prediabetes to type 2 diabetes is not inevitable!

Simple Steps for Prevention:

As a family, make healthy food choices. Start small, by limiting the amount of unhealthy fat you’re eating. Introduce more fruits, vegetables, and fiber into your diet.

Be active! The more active you are, the more glucose (sugar) your body uses for energy. This will help keep sugar from building up in your blood. Start by going on family walks, or learning how to plan healthy meals together.

Small lifestyle changes can have profound impacts on your health and well-being. When it comes to eating right, start small, by substituting processed foods with fresher ingredients. Instead of chips, try unbuttered/unsalted popcorn, if you'd like, add a dash of sea salt. Instead of sugar-packed snacks, try making your own trail mix with dried fruits, seeds, and nuts (add small chunks of dark chocolate for a special treat).
An Ounce of Prevention is Worth a Pound of Cure!

Understand serving size. When looking at the serving size, be sure to compare the serving size to total servings. Serving size shown is based the diet for an average male.

Examine fat content. Good fats (such as monounsaturated and polyunsaturated fats found in nuts, seeds, olive oil, and fish) can help protect your heart and lower cholesterol. Bad fats (like saturated and trans fats found in fast food, butter, and junk foods) raise cholesterol and increase the risk of heart disease.

Look for healthier foods. Try choosing foods that have less refined sugar and simple carbohydrates. Keep in mind that a sugar-free product may have the same amount of carbohydrate grams as its standard version.

Control portions. Check food labels to see the ideal portion size, as it could be less than you usually eat.

My favorite snack is…

Find your favorite snack at home and fill in the list below per serving.

Calories:
Total fat:
Sodium:
Total Carbohydrates:
Sugars:

A healthier substitute might be…
Permaculture (permanent agriculture) is a philosophy of working with, rather than against nature. It is a system of agricultural and social design principles that attempts to imitate the growth conditions seen in natural ecosystems. First, look at how things work in nature, and then attempt to mimic that design in your garden. Trees, weeds, mud, rocks, insects—you name it—use it!

"Permaculture uses the inherent qualities of plants and animals combined with the natural characteristics of landscapes and structures to produce a life-supporting system for city and country, using the smallest practical area." Bill Mollison

Permaculture is a way of analyzing what you have and understanding how to use it for the benefit of all. If there’s a low-lying area of the yard, where nothing grows because of persistent mud, consider digging a pond, or planting a bog garden. Don’t uproot those trees that provide shade, habitat, and aesthetics—plant shade-tolerant species around them. Create your own natural ecosystem by working with what you already have. And who knows, it might just catch on!
Different Strokes for Different Folks

Understanding the basic needs of plants (water, sun, air, and soil nutrients) and their ideal conditions vary depending on the species and variety of plant. Example: A cactus needs full sun, little water, and sandy soil while a tropical fern needs lots of water, shade, and rich soil to survive, so they basically need opposite conditions.

Whether you live in the city or in the country, have a big yard or small spaces, you can practice permaculture anywhere! Think about plants that are edible, are native pollinators, or provide habitat or forage for animals and insects, and plants that grow naturally in the environment in which you live. When you plan and plant with the whole system in mind, you are using permaculture principles! Look at the plants below. Do you know any of them? What do they provide? What do they need to grow well? Where would you plant these?
What’s Composting All About?

Composting is a matter of getting just the right combination of **BROWN** materials high in carbon, such as straw, unbleached paper (such as paper bags from the grocery store), used coffee grounds, saw dust, wood chips, and dead leaves and needles with **GREEN** materials that are high in nitrogen, such as grass clippings, kitchen scraps (egg shells, old bread, vegetable and fruit scraps), and plant materials.

Then, you let them decompose. Micro-organisms and some macro-organisms – such as **WORMS** – will help break down the material naturally over time. Good compost should not stink, it should smell like healthy **SOIL**! Good compost needs a mixture of brown and green materials, water, and good airflow.

Remember, **NEVER** put meat, fish, or dairy products in your compost pile, as these materials will stink and attract pests and diseases to your compost! Also, avoid putting foods into your compost that are oily or greasy.

**DID YOU KNOW?** Approximately two-thirds of our household waste can be composted! Compost produces nutrient-rich soils, which is great to use in vegetable gardens, making the plants healthier and any food they produce more nutrient-rich as well! Don’t think you can compost at home? Look around for community gardens near you, they may be happy to accept your compost materials!
Give it a Try! Start collecting compost materials as you prepare meals, tend to the yard or garden. You can collect your scraps in an empty trashcan or a five-gallon bucket.

3 Easy Methods - for home composting, try a method below!

1) Easy Compost Tumblers (Several Models)  
https://www.pinterest.com/explore/compost-tumbler/

2) Basic Turn Pile Made From Pallets & T-Posts  
http://www.homecompostingmadeeasy.com/turningcompost.html

3) Vermicompost Bins in the Kitchen  
http://www.sustainabletable.org/114/vermicomposting-101
What’s on the Plate?

You’ve probably heard of the importance of incorporating all the colors of the rainbow into your meals to help ensure you’re getting all the nutrients you need, but have you ever considered preparing meals by incorporating foods from the different plant families?

Plant families are made up of plants that are related to one another and often share similar characteristics like growing conditions, seasonality, and pests. Plants in the same family also share many of the same vitamins and nutrients. When you learn about a plant’s family, it can help you learn about many plants at once.

- Nightshade family includes eggplant, potatoes,
- Cucurbits include pumpkins, melons,
- Legumes include beans, lentils,
- Brassicas include kale, Brussels sprouts,
- Allium family includes chives, leeks,
- Umbellifers include parsley, fennel,
- Beetroot family includes quinoa, chard,
- Mint family includes basil, rosemary,
- Grains & Grasses family includes barley, corn,
Next time you plan a meal, think as a family, of ways to incorporate a variety of plants from the different plant families you've learned about.

My Favorite Meal is…

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<th>Meal Ingredients</th>
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