Developing and building collaborations between a cooperative extension service and a local school and its community

Robin Boudreaux Landry
Louisiana State University and Agricultural and Mechanical College, rlandry@agcenter.lsu.edu

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses

Part of the Human Resources Management Commons

Recommended Citation
Landry, Robin Boudreaux, "Developing and building collaborations between a cooperative extension service and a local school and its community" (2010). LSU Master's Theses. 1867.
https://digitalcommons.lsu.edu/gradschool_theses/1867

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
DEVELOPING AND BUILDING COLLABORATIONS BETWEEN A COOPERATIVE EXTENSION SERVICE AND A LOCAL SCHOOL AND ITS COMMUNITY

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Science

in

The School of Human Resource Education and Workforce Development

by
Robin Boudreaux Landry
B.S., Nicholls State University, 1981
August, 2010
ACKNOWLEDGEMENTS

First of all to my major professor, Dr. Krisanna Machmes, I thank you for your support, expertise, and positive attitude. Many times I questioned if I could accomplish this monumental task after being out of school for so long. Your selfless guidance and encouragement has sustained me and given me perseverance. It has been with your help and confidence in me that I have been able to finish in what seems like record time. You are not only a wonderful teacher, but you have become a wonderful friend. You are truly an asset to the LSU AgCenter.

To my committee, Dr. Janet Fox and Dr. Earl Johnson, thank you for agreeing to serve and giving of your valuable time, expert instruction and critical input.

Next, I want to thank the LSU AgCenter for providing me with the foundation, resources and support that has enabled this to happen and for the wonderful opportunity for advancement that this will provide.

I would also like to thank my friend and co-worker, Assumption Parish 4-H Agent, Margo Castro, for her help and support throughout this project and beyond. It has been a work in progress that has resulted in a wonderful opportunity for Belle Rose Primary School. The journey has only just begun.

To the Assumption Parish 4-H Junior Leaders, Assumption Parish School Superintendent, Earl “Tibby” Martinez, the Assumption Parish School Board, Belle Rose Primary Principal, Damien Buggage, Belle Rose Primary School First Grade Teachers, Sally Cancienne, Missy Hahn and Grace Savoie, Belle Rose Primary School, Assumption High School Ag Power Mechanics Teacher, David Carlino and his Ag Power Mechanics class, local businesses, B and B Hardware and Garden Center, Dan Boudreaux Ace Hardware, LeBlanc Brothers Ready Mix Concrete, Jamie Ponville Trucking, LLC, Lula Westfield, LLC, community
volunteers, Robert and Charlene Forrester, Bob Landry, Reginald Simon, Keith Landry and Don Savoie for work on and with the project.

I also want to thank the first grade teachers and students at Belle Rose Primary School for their work in the garden. Their enthusiasm and willingness to take part was a pleasure and motivating factor in continuing the project. The genuine and childlike approach they took made everything worthwhile.

Last, but certainly not least, I want to thank my husband, Keith, and my children, Emily and Brett, for their love, confidence, encouragement and unconditional support during these last three whirlwind years. It is because of their motivation, understanding and patience that I have been able to complete the requirements for this degree. I love you!
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................ ii

ABSTRACT .............................................................................................................................. vi

CHAPTER

1 INTRODUCTION .................................................................................................................. 1
  Rationale ............................................................................................................................. 1
  Purpose .............................................................................................................................. 3
  Significance of the Study ................................................................................................. 3
  Assumptions ..................................................................................................................... 5
  Limitations ....................................................................................................................... 5
  Research Question ......................................................................................................... 5
  Objectives ....................................................................................................................... 5
  Definition of Terms ......................................................................................................... 6

2 REVIEW OF LITERATURE ............................................................................................... 8
  Cooperative Extension Service ....................................................................................... 8
  Focus Areas of Extension ............................................................................................... 9
  Importance of Collaboration ......................................................................................... 9
  School Gardens ........................................................................................................... 10
  Experiential Learning .................................................................................................... 11
  Garden Impacts ............................................................................................................. 11
  Food Policies ................................................................................................................ 12
  Resources ....................................................................................................................... 12
  Community and School Collaborations ...................................................................... 13
  Program Success ........................................................................................................... 15

3 METHODOLOGY ............................................................................................................. 18
  Purpose ........................................................................................................................... 18
  Background .................................................................................................................... 18
  Initiation of Project ....................................................................................................... 20
  Methodology ................................................................................................................ 22
  Data Reliability and Validity ........................................................................................ 22
  Researcher’s Role ......................................................................................................... 23
  Demographics ............................................................................................................... 24
  Participants (Teachers) ................................................................................................. 25
  Participant (Principal) ................................................................................................. 26
  Guiding Questions ........................................................................................................ 26
  Guiding Questions for Teachers ................................................................................ 26
  Guiding Questions for Principal ................................................................................ 27

4 OUTCOMES ..................................................................................................................... 28
  Recording ....................................................................................................................... 29
  Demographics of Parish ............................................................................................... 29
  Demographics of the School ....................................................................................... 30
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of the First Grade Classrooms</td>
<td>30</td>
</tr>
<tr>
<td>Description of Classrooms</td>
<td>30</td>
</tr>
<tr>
<td>Sue Carter</td>
<td>31</td>
</tr>
<tr>
<td>Millie Henry</td>
<td>33</td>
</tr>
<tr>
<td>Gloria Smith</td>
<td>35</td>
</tr>
<tr>
<td>Davis Butler</td>
<td>39</td>
</tr>
<tr>
<td>Researcher’s Observations of School Garden and Its Participants</td>
<td>40</td>
</tr>
<tr>
<td>5 FINDINGS</td>
<td>48</td>
</tr>
<tr>
<td>Compiled Summary of Guiding Questions</td>
<td>49</td>
</tr>
<tr>
<td>Compiled Summary of Probing Questions</td>
<td>51</td>
</tr>
<tr>
<td>Conclusions</td>
<td>53</td>
</tr>
<tr>
<td>Need for Additional Research</td>
<td>54</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>56</td>
</tr>
<tr>
<td>APPENDIX</td>
<td></td>
</tr>
<tr>
<td>A LOGIC MODEL</td>
<td>58</td>
</tr>
<tr>
<td>B COLLABORATION PROJECT IS ANNOUNCED</td>
<td>60</td>
</tr>
<tr>
<td>C BELLE ROSE STUDENTS TOUR BODY WALK</td>
<td>62</td>
</tr>
<tr>
<td>D WISERCISE</td>
<td>64</td>
</tr>
<tr>
<td>E WATCH US GROW!</td>
<td>66</td>
</tr>
<tr>
<td>F CHOOSING A GARDEN SITE</td>
<td>69</td>
</tr>
<tr>
<td>G AG POWER MECHANICS CLASS</td>
<td>71</td>
</tr>
<tr>
<td>H PRESENTATION INVITATION</td>
<td>73</td>
</tr>
<tr>
<td>I GARDENING SONG</td>
<td>75</td>
</tr>
<tr>
<td>VITA</td>
<td>77</td>
</tr>
</tbody>
</table>
ABSTRACT

The purpose of this study was to determine if the relationships and collaborations that were established between a southern Louisiana parish Cooperative Extension Service and a low income community, measured by the number of collaborations, created and launched new programs, specifically the Family and Consumer Sciences (FCS) and 4-H collaboration, created a school and community partnership in a low socio-economic school.

A qualitative study using the interview method was used to gather data. Analysis consisted of examining data for themes and discriminate cases. Guiding questions that centered on specific data were developed. Personal interviews were conducted with the principal and first grade teachers who were chosen because of their involvement with the garden project from its development and implementation. Participants remained anonymous. A digital voice recorder was used to ensure precise answers were obtained.

The results of the study found that the garden project was a positive experience for all involved. The students who took part in this project experienced learning in a variety of ways. It was a positive connection between teachers and parents because it provided teachers the opportunity to speak to parents about their child’s willingness to try more foods as well as present teachers with the occasion to discuss with parents other aspects of their child’s learning. And finally, it provided an opportunity for the local cooperative extension service and local community to give a low socio-economic school in the parish a sustainable, educational project that benefited its students.

Cooperative Extension agents have long been known for their implementation of programs in the parishes (counties) where they work to deliver researched-based information that can innovate, educate and improve lives. Their ability to coordinate has helped establish relationships that lead to collaborations in their community that have enabled their work to be
magnified by the available resources of the collaborators. Collaborations were made through dialogue and hard work and resulted in positive outcomes for all involved. Established dialogue led to trust and buy-in from stakeholders and collaborators. This was essential in developing and building relationships that facilitated and sustained this valuable project.
CHAPTER 1
INTRODUCTION

Higher education across the United States engages in research and teaching. However, there are more than 100 of these institutions of higher learning that are land-grant in their origin. These land-grant colleges and universities have another component, and that component is cooperative extension. Extension plays a key role in the lives of many people across the United States. It is through the work of parish (county) and regional extension offices that this expertise is delivered. These county and regional offices rely heavily on local backing and support, both monetarily and physically. The degree of support and backing is a direct result of programs carried out by the agents that are part of these local offices. Programs delivered by the extension agents help meet the needs of the parish or regional population. Lucrative programs at the local level are often the result of relationships and collaborations of developing a rapport with other entities within the realm of the mutual program.

Extension professionals, both at the state and local levels, are increasingly asked to facilitate collaborations across the spectrum of professional disciplines to address complex community issues. When these collaborations identify issues, develop strategies, then implement and evaluate the effectiveness of these strategies, it is known as “action-research.” When the collaborations transcend not only disciplinary boundaries, but civilian and cultural boundaries as well, to include multiple agencies and a diversity of community members, it is known as “trans-disciplinary research” (Thering, 2009). It is the enduring dependability of this organization that has established the relationship and “go to” attitude from the public.

Rationale

Developing and building relationships and collaborations are essential for agents to be successful in their community and to increase public value for stakeholders.
Successful programs are ones that are consistently asked for and incorporated into local stakeholder programs. Successful extension programs don’t just happen; they are built upon a strong foundation of knowledge, professionalism, sound relationships, strong collaborations and successful programming. In order for an agent to be successful in their programming and in their community, the agent needs to develop and build relationships and collaborations with members of the community who can become their supporters and advocates.

These relationships and collaborations are extremely important for the development of programs in the community that result in programs with strong public value. The public value that credible and needed programming bring to a community establishes the agent as a knowledgeable professional with stakeholders who will then continually seek their services and support them. Community relationships and collaborations help to build strong programs and establish the agent as a dedicated professional who can help the community and increase the public value of their programs for stakeholders in that community.

Maintaining these relationships and collaborations are essential as the community changes as well. As the makeup of the stakeholder base changes, those stakeholders that know the value of the programs to the community can then be cheerleaders to promote them to the new members. This will ensure that the relationships and collaborations continue with future stakeholders through testimonials and tributes. It is because of relationships and collaborations established with stakeholders by cooperative extension agents and the successful programs that they conduct in the parish that local monetary support is continuously pledged through memorandums of understanding. Ozer (2007) concurred that several highly developed projects represent such collaborations between schools and nonprofit organizations.
**Purpose**

The purpose of this study is to determine the relationships and collaborations that have been established between a southern Louisiana parish Cooperative Extension Service and a low socio-economic school and its community as measured by the number of collaborations created and new programs launched, specifically the Family and Consumer Sciences (FCS) and 4-H collaboration, that has created a school and community partnership with the school with the planning, implementing and planting of a school garden.

**Significance of the Study**

A research proposal must demonstrate that the research will be useful in three broad ways:

- contribute to knowledge
- policy arenas should find usefulness and meaning in the study
- should be useful for practitioners

Developing a logic that will solidly defend the proposal entails two large domains: responding to criteria for the soundness of the project, and demonstrating the usefulness of the proposed work to the conceptual framework and research questions posed initially (Marshall & Rossman, 1989).

In applied fields, such as education, demonstrating a study’s significance in all three domains is especially important. General research questions or diffuse topics cannot stand on their own (Marshall & Rossman, 1989). The questions must be supported by evidence. Qualitative researchers rely on observation and in-depth interviewing for gathering information. Observation consists of including events and behaviors. Data collection through in-depth interviewing are often described as “a conversation with a purpose” (Kahn & Cannell as reported in Marshall & Rossman, 1989). Interviews can gather large amounts of data quickly. Probing
questions can be used to prod more conversation from the one being interviewed so as to gather more information than the interviewee would not have normally shared. Throughout the interviews, participants’ viewpoints should unfold and not the researcher’s views.

Another way of gathering data is to use unobtrusive measures. These do not require the cooperation of subjects and are unseen to them. The data assembled by this method results from “nonreactive research” because it avoids “unnatural” reactions from others. Unobtrusive measures are particularly used for triangulation (Marshall & Rossman, 1989). Over the course of the research, the majority of qualitative studies merge a number of data collection methods so as to assess the strengths and limitations of the study. Once the data is gathered; it must be arranged so that it is organized according to categories, themes and patterns, and finally analyzed for emergent similarities and differences. Once this is completed, the researcher must seek out explanations for similarities and differences that will help in compiling the report.

This study was conducted to determine whether developing and building relationships between Cooperative Extension Services and local communities can be accomplished to create and implement a school garden project at a local school.

In order for a study of this type is to be implemented, there must be buy in at many levels. Participants who initiate and implement the project must have support. Those who see the possibilities and have a vested interest in the project’s use and success are more apt to look at the big picture, support it and utilize it to meet their needs. In the case of this researcher’s study, there must be support for the project by the principal, and s/he must then support the teachers in their endeavors with the project. With support, the study can bring about substantial change in the area that is being investigated.

In establishing the true value of the study, questions like how it applies, is it consistent and is it neutral without prejudice or bias, must be answered. This is ultimately important since
qualitative research does not have the general acceptance that quantitative research enjoys. Therefore, more attention must be given to sound rationales.

Assumptions

1. All agents understand the importance of getting to know their parish community organizations and school groups.
2. All agents have an understanding of the responsibility of FCS agents.

Limitations

1. Not all agents possess the traits necessary for building relationships that will foster, enhance or encourage collaborations.
2. Agents don’t always know the people to contact in order for partnerships to form.
3. Agents are not necessarily able to work on a team.
4. Not all agents have the support of the community.

Research Question

To examine the process in which Family and Consumer Sciences in a southern Louisiana Parish establishes collaborations and relationships with community organizations and schools and the outcomes of these collaborations.

Objectives

1. To describe the school and teachers that participated in the collaboration that led to the development of a school garden. The school will be described on social economic terms such as free lunch ratio, demographics and classes and class size.
2. To determine how relationships and collaborations are developed by a Family and Consumer Sciences agent by interviewing individuals involved with the project that led to the development of a school garden.
3. To determine how the school garden, a collaborative outcome, was perceived by the principal and teachers

**Definition of Terms**

**4-H** - a rural and urban youth program sponsored by the U.S. Department of Agriculture, that offers training in agriculture, home economics, conservation, citizenship, etc. through local organizations (4-H clubs) and other activities (http://www.yourdictionary.com/4-h).

**Cooperative Extension System (CES)** - a nationwide, non-credit educational network. Each U.S. state and territory has a state office at its land-grant university and a network of local or regional offices (http://www.csrees.usda.gov).

**Collaboration** - the act of working jointly with others (Researchers Developed).

**Extension Agent** - provides useful, practical, and research-based at no charge information to youth, consumers, and others in urban and rural areas and communities of all sizes (Researchers Developed).

**Family and Consumer Sciences (FCS)** - one of the focus areas in extension that provides research-based educational information for citizens of a state in the areas of food, family and finance (Researcher Developed).

**Relationship** - condition or fact of being related; connection or association (Researchers Developed).

**School Garden** - a special kind of learning center that provides an environment in which students can learn to work with teachers, parents and neighborhood resident volunteers while growing plants and learning the relationship between people, plants and wildlife in all subject disciplines (Researchers Developed).

**United States Department of Agriculture (USDA)** - the federal department, created in 1862, which administers programs that provide services, such as research and soil conservation
and efforts to stabilize the farming economy, to farmers (Researchers Developed).

**Low Socio-economic** - fifty percent or more of the school’s students are on free or reduced lunch (Researchers Developed).

**Family Nutrition Program (FNP)** - provides educational programs that increase, within a limited budget, the likelihood of all low income and Supplemental Nutrition Assistance Program (SNAP- formally Food Stamp) recipients making healthy food choices consistent with the most recent dietary advice reflected in the Dietary Guidelines for Americans and the Food Guide Pyramid (Researchers Developed).

**FNP Eligible** - fifty percent or more of the students are on free or reduced lunch (Researchers Developed)

**Healthier Options for People through Extension 2 (HOPE 2)** - a multi-state grant funded by the Kellogg Foundation through the Mississippi Food Network that is an expanded version of the Smart Bodies Program that encourages healthy living and habits to children in grades kindergarten through 5th grade (Researchers Developed).

**Fit 4 the Future** - grant through the LSU AgCenter that is sponsored by the Wal-Mart Foundation to encourage youth and their families to develop and maintain healthy living practices (Researchers Developed).

**Smothered Cabbage** - cabbage that is cleaned and cooked in a stock pot, usually about 1-2 hours, with water, oil and seasoning until tender (Researchers Developed).
CHAPTER 2
REVIEW OF LITERATURE

Cooperative Extension Service

The beginning of the Cooperative Extension Service (CES) dates back to the early history of our country when more than 50% of the U.S. population lived in rural areas and 30% of the workforce was engaged in farming. The Morrill Act of 1862 established land-grant universities to educate citizens in agriculture, home economics, mechanical arts and other practical professions. Extension was formalized in 1914, with the Smith-Lever Act. It established the partnership between the agricultural colleges and the U.S. Department of Agriculture to provide cooperative agricultural extension work. Smith-Lever mandated that the Federal Government, through the United States Department of Agriculture, provide each state with funds based on a population-related formula (USDA 2009).

Cooperative Extension’s role, reputation and usefulness have expanded with events such as World War I, the Great Depression, World War II and the development of technology. Throughout the years, CES has adapted to changing times as it continues to focus on a broad range of needs in both rural and urban areas. The CES mission is to assist people at no charge to improve their living conditions through an education process based on scientific knowledge focusing on issues and needs (Rasmussen, 1989).

While some Extension professionals may provide discreet "direct service" programming (e.g., a series of water conservation trainings for community members), many assist by providing leadership or capacity building to a committee, initiative, or organization that is directly or indirectly affecting a community, statewide, or regional issue (Brown & Evans, 2004). Regardless of the program, extension expertise meets public needs at the local level (USDA 2009).
Focus Areas of Extension

Today, there are six major areas of extension that focus on a different subject: 4-H Youth Development, Leadership Development, Community and Economic Development, Natural Resources, Agriculture, and Family and Consumer Sciences (FCS) which is divided into three areas: family, finance and nutrition. Presently, Extension professionals and community groups are working collaboratively to develop innovative solutions to promote positive development in children, youth and families. Effective collaborations are able to generate positive outcomes for the audiences they serve (Borden & Perkins, 1999). FCS and 4-H often form a good team for providing effective programming because of the common foundation of youth and family. The educational programs offered by these areas often involve youth in a school setting.

Importance of Collaboration

Agents often collaborate to deliver integrated cross programming. This is important in helping to meet the needs of local clientele. Brown and Evans (2004) maintained that the central role of university Extension professionals is to provide researched-based programming, technical expertise, and leadership in response to community needs. Collaboration receives universal recommendation as a mechanism for leveraging resources, dealing with scarcities, eliminating duplication, capitalizing on individual strengths and building internal capacities. Renquist (2005) agreed that the aim of community organization is to develop relationships between groups and individuals that will capitalize on resources for creating and maintaining community projects. Much of the renewed interest in collaboration has resulted from an appreciation of the multiple factors that shape issues and the impact of dwindling resources (Geran, Rossing & Taylor-Powell, 1998). Astrothe (1991) agreed that collaborations are the highest and most difficult level of working with others, and the sharing resources and developing, implementing and evaluating programs is an added benefit.
The need for cooperation is evident in the educational arena, in both formal and non-formal situations (Place & Ricketts, 2005). Extension program developers, interested in building a community initiative, often look to some form of citizen association composed of many residents who know the local culture and feel a stewardship towards their areas resources (Banach, LaPointe & Zunz, 2006).

**School Gardens**

There is a growing U.S. movement for the “greening” of school yards through gardens at school sites, and much enthusiasm for the potential of garden-based learning in promoting healthy youth development (Ozer, 2007). Because of the current obesity crisis in the United States and the potential of school gardens and farm-to-school programs for promoting healthier eating, these models are likely to receive even greater attention in coming years.

There are multiple rationales for the value of school gardens, chiefly as outdoor “learning laboratories”, as aesthetically pleasing spaces for children to play, and most recently, as places to promote the consumption of fresh produce among a youth population with markedly elevated rates of obesity and Type 2 diabetes (Ozer, 2007).

In the school garden programs that grow edible produce, students generally learn science and nutrition concepts relevant to growing food while they work in the garden (Ozer, 2007).

School gardens appear to be predominantly used by most schools to enhance academic instruction through teaching subjects such as science, environmental studies, nutrition, language arts and math. This indicates that the garden is being used to teach some of the core academic subjects, possibly with the incorporation of core curriculum standards. This is consistent with research in which gardens are being used to incorporate core curriculum in a hands-on setting. Engaging, hands-on learning activities incorporated into subject matter are key components of experiential education in which environmental-based education programs have been employed, emphasizing the development of lifelong learning skills, such as problem solving and critical thinking. (Beall, Graham, Lussier, McLaughlin & Zidenberg-Cherr, 2005, p. 145-150).
Experiential Learning

Ozer (2007) and Blair (2009) agreed that experiential learning improves a child’s chances to use higher cognitive skills.

Two studies examining the outcomes of experiential learning have shown that it effectively stimulated higher orders of cognition. Qualitative pre-assessments and post assessments consisted of written and verbal responses to a series of unrelated hands-on cognitive tests. Both treatment groups improved their post test scores dramatically, showing increases in observational, ordering, comparison, and communication science-processing skills, with neither improvement in the control group nor difference by treatment. From these few studies, researchers can reasonably conclude that experiential learning, rather than gardening per se, improves a child’s chances to use higher cognitive skills (Blair, 2009, p. 19-20).

Garden Impacts

School gardens can positively impact children’s food choices by improving their preferences for vegetables and increasing their nutrition knowledge (Beall et al., 2005). Students harvest the vegetables and, in some programs, learn to cook nutritious meals from the harvest (Ozer, 2007). Schools are using produce from gardens to enhance the garden experience for the students. Edible gardens provide students with the opportunity to become familiar with and eat produce that they have grown themselves, an experience that anecdotally increases the appeal of eating vegetables (Ozer, 2007). Some schools are also using curricula that promote nutrition in the garden. Nutrition curricula used in conjunction with some school garden programs teach topics such as food groups, nutritional and energy needs how to read the nutrition label, appropriate portion size, and the benefits of eating unprocessed foods (Ozer, 2007). Learning environments that are conducive to nutrition of mind and body are becoming more common. Creating a school environment that is supportive of healthful food choices will strengthen students’ perceived self-efficacy to eat more healthfully and is more likely to lead to effective behavior change (Ozer, 2007).
Food Policies

Many school districts have developed food policies in an effort to promote the nutrition of students (Ozer, 2007). These nutrition policies, known as wellness policies, address the nutrition and physical activity in schools as it relates to developing children. In the Child Nutrition and Women Infant and Child (WIC) Reauthorization Act of 2004, the United States Congress established a new requirement that all school districts with a federally-funded school meals program develop and implement wellness policies. When developing their wellness policy, each school district was asked to take into account their unique circumstances, challenges, and opportunities. Among the factors they were asked to consider were socio-economic status of the student body; school size; rural or urban location; and presence of immigrant, dual-language, or limited-English students. Some programs include a “farm-to-school” component in which the school purchases produce from local farmers for their lunch program, and students visit farms to understand where food comes from and how it is grown. School gardens can also help students to understand this concept without ever leaving the campus. Classroom environmental education programs in elementary schools focused on “connecting children to the natural world while making science relevant and interesting and on the promoting children’s stewardship of their neighborhoods and schoolyards”. School garden programs vary widely in scope, intensity of participation and integration into the regular school curriculum even within the same district (Ozer, 2007).

Resources

Schools face multiple challenges in the implementation of garden programs, mainly related to limited resources of funding, personnel and time (Ozer, 2007). Funding sources are often a major problem for garden programs to be sustained. With little if any funding available from the state or the school districts for the overwhelming majority of school gardens, most
gardens rely heavily on donations of funding, technical assistance, labor and materials from school and community members (Ozer, 2007). With the community’s source of funding to maintain gardens, there also comes the volunteer involvement that many schools need to properly carry on the school garden. The gardens have been effective in bringing community members to the school site in many aspects and at different times (Ozer, 2007).

**Community and School Collaborations**

Community and school collaborations can bring about a stronger garden program that will benefit the students. The local CES can enhance the school garden program with its resources which include the research-based knowledge that comes with the experience the extension agents have in their perspective areas of expertise. The services that the CES offers to the community are free, yet professional in that they are educated with up-to-date information and a collaboration base that can lead to a thorough, well-rounded program. These programs include hands on learning experiences, also known as experiential learning, that create a sense of confidence and competence with its learn-by-doing approach. Extension agents can establish a strong foundation upon which the school garden can grow and provide a multitude of possibilities for teachers to foster learning opportunities in all subject areas.

Collaboration is a popular and frequently used method for managing differences among people within a group. Although people forming a group may have the aim of collaboration, creating an atmosphere of collaboration that supports mutual respect and shared decision-making is a difficult challenge (Rebori, 2000). The underlying philosophy of the newly formed partnership is “doing what each does best” (Cable et al., 2003). Many scholars have studied the collaborative process and have suggested that there are several key factors that promote or inhibit the collaborative process (Borden & Perkins, 1999). Extension professionals must understand the process of building collaborations in order to bring together the resources, expertise and new
perspectives that will enable them to effectively address complex problems, improve program outcomes and achieve program sustainability (Blalock & Strieter, 2006).

The aim of community organization is to develop relationships between groups and individuals that will enable them to act together in creating and maintaining facilities and agencies through which they may realize their highest values in the common welfare of all members of the community (Renquist, 2005). Establishing linkages with other agencies takes time, a lot of hard work, and a commitment to success (Astroth, 1991). Finding sources of funding to create a teaching or demonstration garden for Extension educational purposes was difficult, especially during a downturn in the economy. Extension agents are accustomed to being organizers in the community, and this process of creating meaningful partnerships can be a long-term source of support for our programs (Renquist, 2005). The ability to cobble together the resources needed for successful Extension programming is vital due to ongoing budgetary restraints, reduced staffing, and other challenges to continued growth (Blalock and Strieter, 2006). Place and Rickette (2005) concurred that engaging in cooperative relationships across disciplines allows those involved to be more efficient and therefore more effective. What happens during the journey toward effective collaboration is critical for success; the path is seldom straight and often rocky (Blalock & Strieter, 2006).

Each of the following factors influences the collaborative process.

Each of the factors are identified and defined:

1. Communication - the collaboration has open and clear communication. There is an established process for communication between meetings;
2. Sustainability - the collaboration has a plan for sustaining membership and resources. This involves membership guidelines relating to terms of office and replacement of members;
3. Research and Evaluation - the collaboration has conducted a needs assessment or has obtained information to establish its goals and the collaboration continues to collect data to measure goal achievement;
4. Political Climate - the history and environment surrounding power and decision making is positive. Political climate may be within the community as a whole, systems within the community or networks of people;
5. Resources - the collaboration has access to needed resources. Resources refer to four types of capital: environmental, in-kind, financial, and human;
6. Catalysts - the collaboration was started because of existing problem(s) or the reason(s) for collaboration to exist required a comprehensive approach;
7. Policies/Laws/Regulations - the collaboration has changed policies, laws, and/or regulations that allow the collaboration to function effectively;
8. History - the community has a history of working cooperatively and solving problems;
9. Connectedness - members of this collaboration are connected and have established informal and formal communication networks at all levels;
10. Leadership - the leadership facilitates and supports team building, and capitalizes upon diversity and individual, group and organizational strengths;
11. Community Development - this community was mobilized to address important issues. There is a communication system and formal information channels that permit the exploration of issues, goals and objectives; and,
12. Understanding Community - the collaboration understands the community, including its people, cultures, values and habits.

Identifying the collaboration's strengths and challenges assists the collaboration in determining the best course of action to achieve its identified goals (Borden & Perkins, 1991).

Program Success

Successful program development is dependent on a number of issues. Program development is an organized approach used by Extension professionals as they conduct their educational programs. It involves planning, implementing and evaluating. Extension agents often use the Logic Model as the building blocks of accountability (Appendix A). Logic models are a graphic way to organize information and display thinking (Knowlton & Phillips, 2009). The elements of the Logic Model include inputs, outputs and outcomes. Inputs are described as what is invested, whether it is time, money, partners, equipment, facilities or a combination of these. Outputs are what is done and who is reached to acquire the desired outcomes. What is done can include workshops, publications or demonstrations while who is reached can be described as the customers or participants. The outcomes can be short, medium or long term. Knowledge gained, motivation, behavior and practice changes as well as environmental or economic changes are all
part of the outcomes. Knowlton and Phillips (2009) concurred that logic models support design, planning, communication, evaluation and learning. Modeling encourages repetition that reflects a regular thread that provides connectivity that is essential to program and organizational success.

Another issue includes the extension agent’s ability to form collaborations within the community that will allow sustainable programs to be cultivated. Additional issues involve knowing the stakeholders, making contact with them and building upon their knowledge and resources to assemble a portfolio of connections that can be utilized to construct a reputable program. Stakeholders within the community need to be informed about programs that benefit the residents. Within the school system, it is about getting to know the superintendent and establishing a rapport that builds trust and will allow contact with principals at the schools in the parish. This may come about through attendance at school board meetings, being introduced through a mutual contact or from being a resident. Within other areas of the community, collaboration building can start with connections made through word-of-mouth or at the top with the agency’s head. The next step is to form confidence to shape a foundation on which to build a collaboration that will increase community dependence on the local extension faculty to augment what has already been set in place. The establishment of credible programs within the community by the extension agent brings with it an added bonus. It is through these programs that many stakeholders will more than likely have heard of the agent’s work. In small communities, word gets around about programs that benefit the members of the community, especially at the school level. However, keeping residents informed can also be done through news articles published in local newspapers (Appendix B). Cooperative Extension agents foster buy-in from stakeholders by communicating the relevance, quality and impact of our programs through communication, that may include personal contact, written communiqués, or reports that
enables them to not only know what types of programs are taking place, but the impacts that are resulting from them.

Once these collaborations are established, an agent can use the same basic procedure for building the same types of collaborations within the business community. An enormous advantage when doing this type of project is living in the community where the agent is conducting it. The buy-in and support provides the collaborators the opportunity to participate in worthwhile projects for parish residents. This becomes a win-win situation for all involved.
CHAPTER 3

METHODOLOGY

Purpose

The purpose of this study was to determine the number of relationships and collaborations established between a southern Louisiana parish Cooperative Extension Service and a low-income school and community as determined by the number of new programs created.

The information gathered from this study was used to create a plan to establish this type of program in other areas. Rubin and Rubin (2005) discussed advantages of the qualitative interview process and the meaning of evaluation research, “Qualitative interviewing projects are good at describing social and political processes, that is, how and why things change” (p. 3). The type research I am conducting is a qualitative study. The results that I gathered were used to discover how relationships and collaborations were developed, get the perceptions of the principal and teachers and discover if the collaboration could lead to the development of a new program.

Background

This project was born when the program manager from the grant program that I work with contacted me regarding “an opportunity of a lifetime for my FNP audience.” She explained that the second part of a grant was getting ready to be launched, Healthier Options for People through Extension 2 or HOPE 2. In the explanation of the grant, I learned that only eight schools, grades kindergarten through fifth, in the state would be chosen to participate. It is a multi-state, three-year grant involving Mississippi, New Mexico, Arkansas, Florida and Louisiana. As she continued talking about the wonderful opportunity that this grant would have for the FNP eligible audience in my parish, the wheels began to turn. I immediately thought of a teacher I know that teaches at a very low socio-economic school near my home. Studies have
shown that there are a number of rationales for community involvement in schools. Proponents of such involvement emphasize its importance for effective school functioning, economic competitiveness, student well-being and community health and development. When describing the importance of community involvement for effective school functioning, proponents most often focus on the responsibilities placed on schools by a nation whose student population is increasingly placed at risk (Sanders, 2003).

As the explanation for the HOPE 2 grant continued I learned that Smart Bodies was only one of the components. The overall Smart Bodies program is one that not only educates students on the importance of good nutrition and physical health, but incorporates physical activity.

**Smart Bodies** is a comprehensive nutrition education and physical activity program for elementary school children, kindergarten through fifth grade, which is integrated into core curriculum objectives. The program incorporates classroom activities with hands-on learning to teach children how to build strong bodies and active minds. Smart Bodies consists of three components.

- **Body Walk.** Students explore nine organs of the human body in a 35-foot by 45-foot, interactive, walk-through exhibit (Appendix C). At each of the nine stations, children participate in the activities focused on the effects that different foods have on each organ. They are given a take-home activity book to share with their family.

- **OrganWise Guys.** These 10 characters help children understand physiology and healthy behaviors. Hardy Heart, Madame Muscle, Windy the Lungs, Peri Stolic the Intestines, Sir Rebrum the Brain, Peter Pancreas, the Kidney Brothers, Luigi Liver and Calci M. Bone are manifested as cartoons in books, games and videos and as dolls used in nutrition lessons. Participating schools receive a free kit with eight videos, dolls, books, games and puzzles.

- **Wisercise!** This classroom program is a grade-specific educational tool that encourages short bouts of physical activity integrated into academic learning objectives (Appendix D). Activities provided in all curricular materials are linked to the grade-level expectations of the Louisiana Department of Education (Holston 2008).

The project also had optional components that are encouraged:

a. School gardens and support materials

b. Teacher/staff wellness monthly meetings
c. Food Tasting with Food of the Month

d. Parent classes on healthy eating

Knowing this particular teacher and how dedicated she is, I knew that I would also be able to add at least one of the other four components. And that additional component would be a school garden. I knew that with my contacts in the parish I could make this happen. The collaborations that could be put in place to make this happen were endless. Collaboration involves parties who see different aspects of a problem. They engage in a process though which they constructively explore their differences and search for (and implement) solutions that go beyond their own limited vision of what is possible (Gray as cited in Geran et al., 1998).

Initiation of Project

I knew the opportunity that this type of project would bring to the school and how this teacher would fit the mold for what we would need to do and could be accomplished. Her love for and dedication to her students precedes her. The unique type of experiences that she is known to bring to her students and what this could help her bring to them was utmost in my mind. With that in mind, I had the chance to discuss this with her after church one morning. She jumped at the opportunity, and I told her that I would be contacting her again about it. This first discussion with her took place in July 2009. By August, I had made an appointment to meet with the superintendent. We met and discussed this opportunity, and he gave his approval for me to contact the principal at that school.

Being a former teacher in the same community, I began making contacts with local businesses and members of the community that I had worked with on projects as a teacher. I explained the project that I wanted to pilot and how I thought we could make it happen. Some businesses and members of the community immediately recalled other businesses and community members who could help with this type of project. Others suggested names of
possible businesses and individuals who had not participated in this type of venture before, but who may want to get involved. All were enthusiastic and wanted to be a part of it. Every participant brought their own unique abilities and resources to help with the garden project, Watch Us Grow, as the project was ultimately named.

In September, another unique opportunity presented itself when the 4-H agent in our parish learned of a grant that 4-H agents could apply for through the LSU AgCenter. She began explaining that the grant was sponsored by the Wal-Mart Foundation and called Fit 4 the Future. When I learned of this, I quickly told her about the HOPE 2 grant that I was working on for the ABC Primary School. We began brainstorming ways to make these two grants mesh for the project. We downloaded the grant application, filled it out, sent it in and crossed our fingers.

Together, we knew that we could make this project a reality for the school. We knew that both grants were different and had different stipulations, but between the two, we could provide the basis for a wonderful garden project and an outdoor learning area if we used the collaborations and relationships we had built in the communities where we work. Community involvement is seen as one way to help schools produce a more capable workforce (Sanders 2003).

We knew we could work well together given our history. This 4-H agent and I have not only worked in the same parish office for three years, but we had also worked well together prior to our employment at the AgCenter. We had taught at the same school for 15 years. As teachers, we had worked together on various projects for school as well as using the eighth graders that I taught over the years to mentor her kindergarteners throughout those years. Both she and I have a love for combining resources to get projects started and completed. With our experience of teaching different aged children, the contacts that we knew in the community and the help of her 4-H Junior Leaders, we knew that we would work well together on this joint
venture. And so, we embarked on our project, one that has tremendously impacted the first grade students and teachers at the ABC Primary School as well as the local businesses and community. It is one that must and will continue. The collaborations formed and the project’s success has vibrated throughout the parish (Appendix E). The different rationales for community involvement can be realized through a variety of partnership activities (Sanders, 2003). Plans were underway to form collaborations in the community between local hardware stores, garden centers, trucking operations, and community volunteers. It has been through these collaborations that the pilot project has become one that all school principals in the parish want their students to experience.

**Methodology**

I devised a qualitative study using the interview method to gather data. The analysis will consisted of examining the data for themes and discriminate cases. To begin, I developed guiding questions centering on specific queries that reflected the types of information I needed to gather. The interviews were conducted with the principal and first grade teachers. I chose these individuals because of their involvement with the garden project from its development and implementation.

Each interview was conducted in person with the participants remaining anonymous. A digital voice recorder was be used to ensure that precise answers could be obtained so as to more adequately transcribe the interviews. The transcription was done by the researcher.

**Data Reliability and Validity**

Qualitative data measures reliability and validity in a different way than does quantitative data. Reliability is gauged via the simplicity of the method used by the researcher. How detailed every step in the data collection and analysis are has a great deal to do with the ability to be interpreted. In this project, the coding and themes were completed among the researcher, her
chair of the master's committee, and her co-worker also working on a thesis in the same subject area using inter-rater reliability.

Qualitative data measures validity in a number of different ways. In order for the data to be strong, the researcher must incorporate how they chose their site and participants. Patton (1999) discusses three elements which are “rigorous techniques for gathering data, credibility of the researcher, and the belief in the qualitative research process” (p. 1190). In this study, the researcher has made known her credentials regarding her study. A qualitative researcher must be methodical in reporting adequate details and the analysis process used in order for the final project to have value when judged. Triangulation, or the use of multiple methods of data collection, can reveal different aspects of the problem being studied. The data collected has been triangulated the observations of the researcher.

**Researcher’s Role**

As the researcher, I am a relatively new extension agent in a rural, southern Louisiana parish having been in this position for only three and one-half years. Prior to becoming an extension agent, I was a teacher for 25 years in the same demographic area, having taught fifth through twelfth grades. Having graduated in vocational home economics education, with many science classes taken, I began my teaching career as a Science teacher.

My love for nutrition and gardening became a huge part of my Science lessons. Plant Science was always fun for the students; learning about the parts and for those that were edible, the nutritional value that they provided. Now as a nutrition agent, I have the opportunity to use my teaching experiences and nutrition background to provide programming that includes gardening and the importance of eating healthy to low income participants.

Having lived and taught in the parish for almost 30 years has increased my awareness for the need for creative teaching methods to keep students engaged. Devising new and unique
arenas for learning help create learning adventures that often have a tremendous impact on those involved, both students and adults.

Being a resident has also allowed me to know the people in the community, including business owners. My role as a classroom teacher helped me to build relationships with parents of students who are also business owners in the community today. Knowing that these relationships had previously been established, I then began working on how the study would be implemented and conducted so as to gather information that would help to evaluate its achievement. As part of the plan that I was setting into motion, I devised a flow chart that can be used to help others become more aware of what needs to be done in order for a school garden project to become a reality (Appendix F).

**Demographics**

According to the 2006-2008 American Survey Three Year Estimates, the total population of the south Louisiana parish was estimated to be 22,951. In regards to gender, the population is fifty/fifty. The parish is rural and primarily agricultural. The parish seat population, as of the 2000 census, was reported to be 686. There is one school district made up of one parish high school, grades 9-12, four middle schools, grades 4-8, and 5 primary schools, grades Head Start - 4, and one parochial school, grades Preschool-8.

In this rural South Louisiana Parish, 21% of the population has less than a ninth grade education and approximately 57% of the population consists of grandparents raising grandchildren. Fifty-five percent of the households in the parish have both parents working and fifty-five percent of the households are headed by a female without a husband (U.S. Census Bureau, 2000).

The school in which I conducted this project is located in a small community north of the parish seat. It is situated along a body of water, between two Baptist churches and near a sugar
cane field. The student enrollment, grades Head Start through 4 is 327 students, 312 African American, fourteen Caucasian and one Hispanic. The internal breakdown of the classes is as follows: Head Start, two classes, Pre School, four classes, Kindergarten, two classes, First Grade, three classes, Second Grade, three classes, Third Grade, two classes and Fourth grade, three classes. The school food service provides breakfast and lunch to students. Seventy-five percent of the students are on free lunch and 4% are on reduced lunch.

The garden project was conducted with the First Grade students at the school because of teacher interest and buy-in. The three First Grade classes are taught by three, white female teachers. The class size is approximately 16 students per teacher. The gardens are two raised beds: the first measuring three feet wide, six inches deep and 24 feet long, and the second measuring three feet wide, 12 inches deep and 24 feet long. They are located immediately outside the wing of the school where the First Grade classrooms are housed. The beds were built and installed by community volunteers. In addition to the gardens, a raised outdoor learning area that was put in as part of the project, sits about 10 feet from the garden beds under an oak tree. It was designed by the Ag Power Mechanics teachers and built by his class at the local high school. This was all accomplished through collaborations made with the local school board and community.

**Participants (Teachers)**

The three First Grade teachers are all white and female. They have varying backgrounds, teaching experience and offer their students a variety of teaching methods and learning styles. Two of the three live in the school community while the other resides in the parish about 12 miles away.
Participant (Principal)

The principal is a male African American who lives in the parish. He has a genuine desire to see the children at his school succeed. The school where he is principal is approximately 96% is African American. He serves as a role model and has deep roots in the community.

Guiding Questions

The questions that I used were developed to gain information from the teachers regarding their involvement with the garden and outdoor learning project as well as the students reactions. The guiding questions for the principal were developed to gain insight as to his perceptions about the projects as it related to his school and the impact that it had on the students. My goal was also to learn the value that such a project, with the collaborations established between Cooperative Extension Services and Local Community, would have in a low socio-economic school.

Guiding Questions for Teachers

1. How long have you been teaching?
2. What degree do you hold?
3. How would you describe the students that you teach?
4. Why did you want to get involved with a gardening project?
5. What was the students’ initial reaction to the garden project?
6. How do you think this project impacted the students?
7. How do you think this project affected their socialization/teamwork?
8. How do you think this project affected their willingness to try new foods?
9. How do you think this project impacted their consumption of fruits and vegetables?
10. What are your overall thoughts on this project?
Guiding Questions for Principal

1. Why did you buy into this project for your school?

2. How do you think this project has impacted the first grade students?

3. Would you recommend/promote this type of project to other school principals in the parish?
CHAPTER 4

OUTCOMES

I began my investigation of how developing collaborations between the cooperative extension service and local community could benefit neighborhood schools in the community in establishing and maintaining a school garden through inquiries with some former collaborators from my teaching experiences. I was guided by my thoughts of whether developing and building relationships between these two entities could establish and sustain a garden at a local school and be used as a model to create a similar project at other schools. With hard work, the establishment of working relationships and implementation of the project, I was able to gather thoughts, ideas and information for my study from teacher and principal interviews.

Guiding questions used with teachers to gather impact from the project include:

1. How long have you been teaching?
2. What degree do you hold?
3. How would you describe the students that you teach?
4. Why did you want to get involved with a gardening project?
5. What was the students’ initial reaction to the garden project?
6. How do you think this project impacted the students?
7. How do you think this project affected their socialization/teamwork?
8. How do you think this project affected their willingness to try new foods?
9. How do you think this project impacted their consumption of fruits and vegetables?
10. What are your overall thoughts on this project?

Guiding questions used with the principal to gather impact from the project include:

1. Why did you buy into this project for your school?
2. How do you think this project has impacted the first grade students?

3. Would you recommend/promote this type of project to other school principals in the parish?

**Recording**

To properly record their responses, I used a Sony IC Digital Voice Recorder. The teacher responses from the interviews were transcribed by the researcher. The teachers’ names were changed and were Sue Carter, Millie Henry, and Gloria Smith. All are First Grade teachers at ABC Primary School with various backgrounds and teaching experiences as well as various years of experience. The principal’s name was changed as well and was Davis Butler. The names used for the teachers, principal and school are pseudonyms.

**Demographics of Parish**

The southern Louisiana parish where I piloted this project was established on March 31, 1807. The Parish was created five years before Louisiana became a state and had previously been part of one of the earliest settlements of Louisiana, Lafourche Settlement. The Parish has always been an agriculturally based parish, beginning with the Indian inhabitation. Historical records indicated that the first settlers to come to the region were likely trappers and traders, but farmers soon followed. The total area of the parish is 365 square miles, 26 square miles being water. The population as of the 2000 Census was 23,288. This rural parish has access to waterways and is very traditional in many aspects.

In 1861, sugar cane became the principal crop grown in the parish. Since then, most soils in the parish not prone to flooding have been used for the production of sugar cane. Today, this southern Louisiana parish remains an important sugar cane producing parish. Large farms or plantations have kept sugar in production for generations. Many of the antebellum homes located throughout the parish are a reminder of life in the parish in the 18th century.
Demographics of the School

This school is one of six primary schools in the parish and provides educational programs to students in grades Head Start through 4. ABC Primary School is located in the northern end of this rural parish and has an enrollment of 327. There are 20 classroom teachers and numerous paraprofessionals and subject matter coaches. Teachers have a set schedule that they follow to ensure that the students are ready for the next step in the sequential learning process. The First Grade teachers use a wide variety of techniques to teach the children. Learning takes place in many places throughout the school, including nontraditional classroom settings. This group of teachers is constantly looking for new ways to motivate and stimulate learning in their students. The garden project has supplied teachers with a new and exciting outlet for teaching the children about responsibility, citizenship, fairness, caring and respect. It has also provided them with motivation, encouragement and confidence.

Location of First Grade Classrooms

The First Grade classrooms are located in one wing of the school that also houses three Second Grade classrooms, an intervention room, a boys’ bathroom, a girls’ bathroom, and a teachers’ break room. The walls are adorned with bulletin boards that have school related news or positive reinforcement messages. There are two benches that are on the wall opposite the bathrooms.

Description of Classrooms

The ABC Primary School First Grade teachers are dedicated to providing as many learning opportunities as possible to their students. Before I entered the classrooms, I always looked through the tiny rectangular, Plexiglas window above the doorknob to see what is happening. Their classrooms are typical First Grade classrooms with alphabet and number charts on one wall, hooks for coats and backpacks three feet off of the floor on another with cabinets
above for storage, a white board for lessons on a third and finally windows on the fourth with
tables for centers under them. Students sit at tables with four to five students per table for a total
of four tables. Each teacher has a conduct wall chart that allows her to visually relay to the
children when their behavior is not appropriate or acceptable. Each room is set up the same way;
the only major differences lie in the posters that each teacher has hanging on the available wall
space and the arrangement of the tables.

**Sue Carter**

Sue Carter’s room is a bit more cluttered than the other two teachers, and when you walk
in there is always more movement and noise. Things are a little less systematic and could be
described by many to have organized chaos. The smells of children fill your nostrils; their tiny
little heads turn to see who has entered the room. There are 16 students, seven males and nine
females. The class is composed of 14 African American children and two white females who are
twins.

Sue Carter’s responses to the guiding questions are as follows:

1. **How long have you been teaching?**
   - 27 years

2. **What degree do you hold?**
   - Bachelor of Science

3. **How would you describe the students that you teach?**
   - They are underprivileged. There is a great, great lack of exposure and in the same
     sense; there is a willingness to learn especially about hands on, down home
     learning.

   **What is your motivation for teaching?**
   - My motivation for teaching is comes from the fact that the need is great and there
     is really big connection between myself and these needy little creatures; I love
     them.
4. Why did you want to get involved with a gardening project?

- I love getting involved in learning experiences. In a previous that I worked at, we had a garden and I saw the benefits, but this one was in a way that was much more child friendly because it allowed the children to learn their bodies as it paralleled with healthy foods that we were actually growing and I thought that it was great.

5. What was the students’ initial reaction to the garden project?

- Right away, I’m thinking of little responses from them and they were like “My Pa-pa has a garden”. It was real, it brought it home to them which I think is good because it’s (the garden) not something that’s not attainable, even at home.

6. How do you think this project impacted the students?

- I think that this project has had a tremendous impact on the students. Aside from the body and exercises that they do in the morning, they know the organs, like cerebrum and heart, and they know the functions of these organs which I think is tremendous. They are first graders and the impact of putting that tiny little seed in the ground and then months later without a whole lot of care, God does the rest, they pull up these carrots and it is incredible. We read the envelope of carrot seeds, and we parallel the garden to so many other things, and what we do in the classroom and real life. It’s been a wonderful lesson; it’s doable for them at home. I think it is absolutely wonderful.

7. How do you think this project affected their socialization/teamwork?

- If you would see at recess, how adorable they are. Because it is their watering time, they line up to get the can to water the plants. They feel a need to take care of the plants. Some were concerned about them when we were not in school for a week. They asked who was going to water them, who’s going to weed. The students really pay attention to it. They’ve taken little seedlings home, they say they planted them, but I’m not sure about that, but anyway, it is alright.

8. How do you think this project affected their willingness to try new foods?

- It has had a tremendous impact. In the cafeteria, we have a sticker chart, which is such a simple idea; it has cute little stickers placed on the chart if every child has tasted a fruit or vegetable on their plate. I do a quick little count to see if we get to put a sticker on the chart for that day. They love it. When we had cabbage in the garden, Grace smothered one for her class, and I did the next day. They were fighting for their taste of the smothered cabbage and that is something they don’t cook in the cafeteria. It was something that they had grown in the garden; they watched it grow and as they ate it, they would say this is a vegetable from our garden—this is fun.
Do you think any of the students had seen vegetables that they have eaten in the cafeteria grown at home?

- Some had seen, but they were not made to notice that their mom or grandmother was cooking it. It’s like when I asked where beans come from and many would say Wal-Mart. You know now they have an added dimension—they know that beans come from a garden before they get to Wal-Mart.

9. How do you think this project impacted their consumption of fruits and vegetables?

- I know this project has helped them in their consumption of good healthy foods even at home because some parents have said to me that they ask for it (healthy foods) at home. I know it has helped them at school tremendously just

10. What are your overall thoughts on this project?

- I know it has helped them in their intake of good, healthy foods even at home because some parents have said to me that they ask for it (healthy food) at home. I know it has helped them at school tremendously just to notice that their body is theirs to take care of and in order to stay healthy, we need to do this. One day while we were talking about the garden and the foods we were growing, one of my students said, “We lose fat by eating healthy vegetables.” It is allowing them to make connections.

What is your hope for your class in regards to the garden next year?

- Last year we did projects with our first graders, and we were hoping that as second graders this year, they would have asked why we didn’t do a garden last year, but they haven’t. It could be that that’s just a fact of their little lives. They go from one thing to next thing, and they know that they can’t carry it with them, but this is something that they can take with them because they can garden at home.

Do you think the second grade teachers would be willing to have a garden so that the kids can continue with the gardening experience?

- I am retiring at the end of this year. I have offered to come on Fridays for the children who have done well all week so that they can paint and do the things that the children like to do. I would be willing to help these little people in the garden. It could be used as a reward and incentive to encourage positive behavior.

**Millie Henry**

Millie Henry is the youngest of the three First Grade teachers. Her room is located at the end of the hallway near the door that leads to the garden area. Upon entering, one knows that
schedules are followed. Ms. Henry’s teaching experiences leave her a little less confident in her ability to stray from structure. She follows a schedule to ensure all bases are covered. Routine is evident as students know their procedures for doing things. The room is organized; there is a place and everything is in its place. There are 17 students, seven males and eight females. All students are African American.

Millie Henry’s responses to the guiding questions are as follows:

1. **How long have you been teaching?**
   - 6 ½ years

2. **What degree do you hold?**
   - Bachelor of Science

3. **How would you describe the students that you teach?**
   - Low income; low socio-economic

4. **What’s your motivation for teaching?**
   - Students need me and to see them learn something when their faces light up that makes me feel like I’m accomplishing something

5. **Why did you want to get involved with a gardening project?**
   - I figured it would get the kids excited. I love to get involved because it’s not something that most would get to do. Because it is something they might experience for the first and only time.

6. **What was the students’ initial reaction to the garden project?**
   - They absolutely loved it. They were excited to be able to take part in it.

7. **How do you think this project impacted the students?**
   - It gave motivation for students to be good in class. It was used as a sort of reward—they can’t go outside to tend the garden if they are not well-behaved in class, it helped them to want to behave better in class.
7. How do you think this project affected their socialization/teamwork?

- They work together well now. They water by taking turns and don’t fight over who gets to do it. In class now, they have a better sense of how to work as a team and are more aware of what they are doing that may not allow the class to have a certain privilege.

8. How do you think this project affected their willingness to try new foods?

- It has influenced their ability to try new foods. They see others eating a fruit or a vegetable and they have this sense of competition. They try the food and sometimes discover that they actually like it.

9. How do you think this project impacted their consumption of fruits and vegetables?

- They are more willing to try them. They have become more aware of where fruits and vegetables come from and the importance of eating them for their health. The students are very knowledgeable about what is in the garden and what they are growing. They are very aware of how quickly the vegetables grow; their observation skills have become more acute which has helped in other areas of their learning. When we go out to recess, they always stop at the garden to check on things. They take a look, and tell us when they think things are ready to be picked because they know that this means that they are going to have a taste.

10. What are your overall thoughts on this project?

- I think it has been very successful, and it has been a wonderful extension of the classroom. I don’t think that they realize that they are learning more than just gardening. They really have no clue how this has carried over into the classroom, and increased their consumption of fruits and vegetables in the cafeteria. The health conversations that we have had revert back to the garden and what we are growing. I have had parents who want to see the garden because their child has talked about it at home.

Gloria Smith

Gloria Smith’s room is one that the children enjoy being in, as evidenced by the pride they take in showing you everything that is new since the last time you visited. They have a sense of ownership and belonging. They are engaged and motivated by the praise and challenge they get from Mrs. Gloria when doing their work. They know that there is a method of doing things, like not interrupting Mrs. Gloria when she is talking to another adult. Her love for her work is felt every time she talks about her class. The passion she feels for her students’ health, in
both mind and body, are obvious when she voices her concern for one of the male students in her class who is grossly overweight. She is concerned about his health and how she can help him through this garden project that incorporates healthy eating with physical activity. There are 15 African American students, six males and nine females.

Gloria Smith’s responses to the guiding questions are as follows:

1. **How long have you been teaching?**
   - 19 years

2. **What degree do you hold?**
   - Bachelor of Science degree. I am certified in Elementary grades 1-4 plus I have a degree in veterinary medicine.

3. **How would you describe the students that you teach?**
   - Most of the students I teach are at risk, low income. They come from a one-parent family. My students are very excited to learn and eager for anything that we give them.

   **What’s your motivation for teaching?**
   - Seeing what the students can do, where they come from and where you can get them to go just by making them excited to learn.

4. **Why did you want to get involved with a gardening project?**
   - I love anything outside and I garden at home. Anything that is real world that kids can touch is such a motivating factor to learn.

5. **What was the students’ initial reaction to the garden project?**
   - At first it was not much of anything because they had no idea of what it involved. Some had never experienced a garden before and others were “Oh, whatever.”

6. **How do you think this project impacted the students?**
   - Oh my God, where do I start? Health wise I see they are eating better in the cafeteria, they will try more foods, they are exercising more and their writing is so much better because they are excited about what they are writing about. The kids are much more aware environmentally, not just about the garden and plants, but about keeping the yard clean and keeping everything nice.
I have had the opportunity to talk with some parents and told them about the
garden and how excited their kids were about it. I also talked with them about the
fact that their kids love the garden and that I hoped that they might start a garden
at home.

Several of the kids say they help their grandparents in the garden. I wanted to
take that opportunity to make a connection with the health part of it, making good
choices when they are having a snack; eating carrot sticks instead of chips. I don’t
know if they will, but I am hoping that they will, all have a little garden at home
in the yard or when they grow up and have someone else helping they will look
back and want to do it for themselves because it was such a good experience.

7. How do you think this project affected their socialization/teamwork?

I think this project has helped tremendously in their socialization skills and their
ability to work more as a team, especially in the classroom and in watering the
garden. They are very excited and want to show everyone what is growing in the
garden, like the cucumber that’s gotten bigger since morning recess. I will tell
you this and it’s amazing; they line up, seven to 10 of them every morning recess
to water the plants. We have four watering cans that are alike and one that is
different; a little red watering can. The kids line up with their little bucket, I fill it
with water while they are in line and then they water a plant. Whoever is the next
in line is the person you give the can to. The can you start with is not yours to
keep; you give it to the next person in line and then you get behind the line. This
is teaching them to share and they are really cute about it. They stick with it. The
little red watering can is the problem. They all want it because it’s tiny, but it’s
really cute. They will sit and wait for it to come back. They will actually let the
next person behind them go ahead of them to be able to get the little red watering
can.

8. How do you think this project affected their willingness to try new foods?

They pretty much will all put vegetables on their plate and if it’s something they
don’t like, they normally taste it at least, and some of them really like it. Their
favorite food that we cooked from the garden, unbelievably, was smothered
cabbage. That’s what they kept asking for when we would cook. We, the
teachers, baked carrot cake when the carrots were ready. We also, made
vegetable soup using pretty much all of the different vegetables that we grew in
the garden. By far, their favorite food was the smothered cabbage.

Were they surprised to see where and what some of the foods in the cafeteria looked like
when it was growing in the garden?

Yes, now we have green beans out in the garden and can’t wait to see what they
all say. They are now watching seed to plant to flower and the produce. They are
finding it fascinating because the winter vegetables that we had came from plants
that we had planted. Now they can see the whole process.
9. How do you think this project impacted their consumption of fruits and vegetables?

- They are eating more in the cafeteria. It drives me crazy in a good way because they tell me to look at their plate and constantly tell me that they just ate a vegetable or fruit. It sounds like “Look Mrs. Gloria, I just ate all of my ___________ (whatever the fruit or vegetable happened to be). The participation in this project has definitely carried over to their attempting and being willing to try new foods.

10. What are your overall thoughts on this project?

- Everything was perfect and the outdoor classroom is so much more awesome than anything that I was imagining in my head. It is wonderful; kids play there at recess, we take them out and I want to use it more-I want it to become a habit, going out there. We have used the outdoor classroom for science and reading.

Do they associate the garden with classroom learning?

- No, I don’t think they do. It is subconscious. I think eventually it will all click that they will make it all connect, that while they were having fun in the garden, they are learning. They are not thinking that in their little heads right now.

What is your hope for your class in regards to the garden next year?

- This is what I am thinking about doing because I can’t imagine them not doing this. If we don’t have a separate Second Grade garden, I am thinking about figuring out a way that they as Second Graders will have one of the two beds and the First Graders could have the other. We would somehow work together. I am hoping that the Second Grade teachers will buy into it and do it.

How willing do you think the Second Grade teachers will be?

- Because we are a takeover school, we are not sure who the Second Grade teachers will be. We are not sure of anything really because of all the commotion going on with talk of layoffs, academic performance levels and the reassignments that we are hearing about. I’m hoping that they would be willing if we (First Grade teachers) do the leg work part and all they would need to do is like keep it going because those kids go to recess out on the same play ground as First Grade, where the garden and outdoor learning area is located. I was thinking that if we gave all of the students in First and Second Grade the opportunity to feel ownership of the garden area, then we’ll all take care of it together because it will belong to all of them. If that is the case and it does happen, they will all want to protect it by making certain that the basketballs don’t go rolling into it and they make sure the garden gets watered at recess and weed it. The Second Graders, since they have taken care of the garden this year,
could be the role models for the First Graders next year which would provide a wonderful opportunity for mentoring and partnerships.

- I am picturing and hoping each year as they go on, there will be another something like the garden in their area. Then, as they (the students) come in each year, the upper grade teachers will then have a group that is trained and experienced in it so that when they move up, they carry their knowledge and all they need is the bed.

- Thank you so much because we could not have done this without you because financially we have no funds for this, so you gave us backing to be able to do this and give the kids an experience of a lifetime. The kids just took it and ran with it. I mean, it’s their garden, and they love it.

**Davis Butler**

Davis Butler is a male African American that grew up and lives in the parish where he works. He is the father of two, a boy and a girl. His daughter, the younger of his two children attends ABC Primary School. He has been principal at ABC Primary School for three years, and prior to this, he served two years as assistant principal. His love and commitment to this parish and school is evident by the pride he takes in his work. He speaks to the children with respect and dignity and deals with the children who need guidance using a firm, loving voice. Davis Butler is a role model for the students of his school and demonstrates to them that he cares.

Davis Butler’s responses to the guiding questions are as follows:

1. **Why did you buy into this project for your school?**
   - I thought this would be a wonderful opportunity for students to experience something that they may never experience in their life. The majority of our students come from really low income families; some work, but many rely on food stamps. We try to provide as many new learning opportunities for our students as possible each year. This project was much needed considering that many do not eat healthy nor do they have role models at home for healthy eating. As you know, African Americans suffer from many chronic diseases that we need to address at early ages.

2. **How do you think this project has impacted the first grade students?**
   - The First Graders have benefitted tremendously from this project. Many are much more aware of what and how much they need to be eating when it comes to fruits
and vegetables. It has made them realize that they need to take care of their body. The teachers have commented on how using the garden as an incentive and in getting the kids to behave in appropriate ways has changed the students and helped them to get them to do more. I have been able to develop a taste for some vegetables that I had never eaten. I have used the garden for snacks in the morning and afternoons. The students have seen me and they remind me how much vegetables are good for the body. Some will never get this opportunity again because many are from single parent households where money and time are factors, and others are much more aware of gardens because their grandparents have one at home.

3. **Would you recommend/promote this type of project to other school principals in the parish?**

- Most definitely. Garden projects have benefits that some are yet to realize. They provide children with hands-on learning that enables them to better understand. It has allowed some students to make connections that would otherwise not be made. The garden project is one that can stimulate senses in a child that can only be made through the experience. I highly recommend it, and it is my hope that this project will continue here at ABC Primary School. I just wish that my daughter who is in Fourth Grade would have had this opportunity while she was here.

**Researcher’s Observations of School Garden and Its Participants**

The garden project was off and running in record time, with my love for gardening and the teachers’ enthusiasm to provide their students with a unique and possibly once in a lifetime experience. Everyone was so eager and energetic to do what was necessary and needed to get things done. My contact and conversations with the teachers and principal were continuous, as they provided me with much needed information to fill in the gaps of what I was planning for this project. Ideas about what could be accomplished through the collaborations that I had been forming were never scarce. I was always trying to think beyond the basics since I knew that the teachers and students would be appreciative of even the smallest things that would be part of this project. With the school being a low socio-economic school, it was evident that they would be grateful for anything beyond what they had at that time.
During the course of this project, I visited the school on a weekly basis, sometimes more than once a week to get a better idea of what the children needed to increase their knowledge about nutrition and health through gardening. I would visit the First Grade classrooms to see how things were going, to talk with the teachers and students or to deliver a mini nutrition lesson. Each time was a positive visit, and my excitement about the project would grow as the children’s enthusiasm was conveyed through their eagerness to tell me about what they had been doing and learning in the garden.

The numerous visits revealed the need to continue “dropping in”; often just to allow the students and teachers to inform me about an experience or learning opportunity that they had had in the garden or within a classroom lesson. The teachers would frequently tell of unique comments that the children had made that related to the encounters they were having throughout this project.

In the beginning, after the raised beds had been constructed, the rain made it impossible for the students to plant. Day after day, the rain made the project seem like an empty promise to the students as evidence by the almost daily emails that I received from one of the teachers. In the emails, she relayed the children’s distress in seeing the bare beds. Not wanting to squelch their zest for this venture, my wheels began to turn as to what I could do to get this started. To rectify this rain delay situation and please the students, I purchased peat pots, potting soil and carrot seeds. I packaged them into three separate containers and delivered them the next day to each teacher. I proceeded to explain my plan. Within days, I had an email telling me how much the students enjoyed planting their carrot seeds, and that the pots were now being watched for the first sign of new life.

As the rains began to subside, the beds began to dry out and the children began “playing” in the “dirt”. They would see weeds beginning to grow and the teachers launched the garden
lessons. The students began working the soil with the tiny rakes and shovels that had been purchased for their little hands. This was done to help dry the soil for planting. As the days went by, one of the teachers, whose eagerness and love for the garden matched mine, called to tell me she had purchased six plants, two for each first grade class, and they had let the students plant those as well as the peat pots with the carrot seeds. I knew it was time to expand the garden. I went to the local garden center and purchased broccoli, cauliflower and cabbage plants and brought them to the school. The next day I received a call that they had all been planted and the children wanted me to see them, so the very next day I made the trip to the school.

The garden was becoming an obsession with the children; they were going out to recess and instead of playing, they would go to the garden to check on things and make sure everything was alright. Then, the first of the holidays arrived, Thanksgiving, and some students expressed their concerns to the teachers regarding who would take care of the garden during that time. Their fears were relieved when Mrs. Gloria and Mrs. Sue told them that they would to check on them. These two teachers lived very near the school and often could be found at school long after hours or on weekends. They reassured the children that everything would be alright.

When they arrived at school after the holidays, the plants were thriving, but the weeds had also begun to grow. The teachers knew that the garden had to be the children’s responsibility and quickly taught them how to weed. Their pride was evident in the fact that many of the students began using their recess time to pull the stray weeds that were growing within the beds. Ms. Sue reported that it was during a spelling lesson one day when they were learning the long “e” vowel sound that when she asked her students if they could think of other words that had the long “e” sound, one responded “weeding”. She was flabbergasted. The joy in her voice during my next visit as she told of that moment in class was heartwarming. I was shocked as to the impact that this garden was having on these students. Ms. Sue then proceeded to tell me that the
lesson was then taken outside to the garden so that the students could practice the long “e” vowel sound by “weeding”. In order to incorporate more gardening into the day, the teachers began finding creative ways to incorporate the garden into their lessons. In one of the First Grade classes, the seed packets from the spinach seeds they had purchased to plant were used to discuss the seasons in a science lesson, spacing using measurement in math and in reading to discuss following directions.

As the fall garden began to produce, the teachers began the exposure to fresh vegetables. The teachers would cut broccoli, wash it and allow the students to taste it. They asked that they taste it plain and then allowed the children to dip it in low fat dressing. Many had never tasted it in its uncooked form. Many said how good it was. In the same manner, the students were allowed to pull carrots, wash them and taste. This too, was a unique experience for them since many had only seen the carrots as they were served in the cafeteria. With all of the carrots that were growing in the garden, the teachers knew that they could not let them go to waste. The carrots were pulled one day after school by the teachers and brought home to be turned into carrot cake. The next day, the students were treated to fresh carrot cake. What a delight to hear how they loved the cake!

With the cold winter days came the idea by one teacher to turn their vegetables into soup. The cabbages had grown to size; there was spinach and carrots, and the students’ appetite. At recess, the students were allowed to pick the vegetables. They put them in bags for Ms. Sue to take home. Upon arriving the next day, Ms. Sue’s room was filled with the aroma of fresh, homemade vegetable soup. All day her students smelled the simmering soup that sat in two pots on a hot plate in a remote corner of the classroom, away from the children. By the afternoon, she reported that the children could stand it no longer. Two of her students left the classroom, to
invite the other two first grade classes to join them in the teachers’ break room for a bowl of soup.

On one visit to the school, I talked with the principal about the garden. He told me of the pride that the children were taking in it and the way they were taking care of it. In the course of our conversation he also confessed that he had also been enjoying the produce from the garden. He then continued telling me that as a child he did eat or like broccoli simply because he had never been given the opportunity to try it. His taste for this nutritious food was now evident as he told me that he had been cutting broccoli for snacking during the day.

With taste testing becoming a routine using produce from the garden, teachers told of their students’ willingness to try new fruits and vegetables that were being offered in the cafeteria. This had a great deal to do with the garden, but also because each teacher had been given a fruit and vegetable chart to track their students’ tasting of fruits and vegetables as part of the HOPE 2 grant. Some students who had not been willing to at least try new fruits and vegetables began tasting so that the class could get a sticker for the day. The rule was that everyone had to have a least tasted one in order for the class to get the sticker. As this continued, many developed a fondness for new foods.

During recess, one teacher reported that there were some students who would take the responsibility for being the “keepers” of the garden. When I asked what she meant, I was told that they would make sure the basketballs that were being used on the nearby playground would not go into the beds to damage the plants. She told me how that gave her a warm fuzzy feeling inside to know that it meant so much to them.

Teachers would often bring discussions about nutrition into subject matter areas. They would ask students probing questions to get them to trigger their recall of knowledge. One day when asked what the garden meant to them, one student responded “We lose fat by eating
healthy vegetables.” What a wonderful correlation at such a young age! During that same class on that day, Ms. Sue asked the class where green beans come from. The reply from one student was, “Wal-Mart.” She explained that they are actually grown in a garden like the one they have before they get to Wal-Mart. In order for that to be reality for that student, teachers planted green beans in the garden during the spring. Once again, this act demonstrating the First Grade teachers’ determination to provide as many concrete learning experiences as possible to their students.

In March, the outdoor learning area was put in place. Many teachers at this low socio-economic school were amazed that their school was worthy of something so nice. They were even more astonished to learn that it was the Ag Power Mechanics class at the local high that had designed, built and installed it (Appendix G). They were unaware that the local high school offered such courses. It was such a pleasure to see the teachers’ and students’ expressions when seeing it for the first time. A few days later the formal presentation to the school was made with many of the volunteers who worked on the project attending as well as school board and police jury members and LSU AgCenter personnel. Also present were the First Grade classes who had tended the garden and were the main reason all of this had taken place. The presentation was planned by the agents to publicize this program to the rest of the parish (Appendix H). The First Grade classes were asked to take part in the program. One class was asked to lead the pledge of allegiance, another wanted to sing a song and in the other the students asked if they could tell what the garden meant to them. All took such pride in their part. The pledge of allegiance was recited with such loyalty while each member of that class held a tiny flag. The students who sung the “Gardening Song” took pleasure in letting everyone know that it was their teacher who had written the song that was sung to the tune of “Row, Row, Row Your Boat” (Appendix I). And finally, the last class had some students who came forward and told the audience what the garden
meant to them. They spoke with such gratification and delight about the garden and their experience with it. Everyone was amazed at their comments. This teacher had used reading as an opportunity to give her students the chance to vocalize their thoughts. She had asked them to write a response to the question and picked them up. After reading them, she sat with them individually to ask probing questions to get them to expand on their answer. She then wrote word for word what they said. Going home that night she then polished them to make them more understandable. Printing them on her computer in large print and bringing them with her to school, she then gave them back to the students. Ms. Gloria asked if any of them wanted to share what they had written. Every little hand went flying into the air. They all had the opportunity to read from their paper. She then had to decide who and how many would be chosen to participate in the garden presentation. Before doing that, she explained her plan to the class. That gave many of the students the chance to say opt out of her next proposal, who wanted to talk at the presentation. The students, five in all, were allowed to tell everyone present at the garden presentation what the garden meant to them.

Two weeks after the presentation, I was at school for a visit when I met the assistant principal on the walk way. She wanted to thank me for helping to make the garden and outdoor learning a reality. As we spoke, she also told me that there were times during the day when she would go and sit in the outdoor learning area just to escape.

And finally, as part of the HOPE 2 grant’s Wisercise component, students learned the importance of physical activity. Teachers introduced the students to ways of incorporating physical activity into regular class time. They would start with the cadence which prepared them to pay attention and follow the directions. On some days, I would stand in the hallway, peering through the Plexiglas window to see what they were doing and often saw this in progress. The cadence was something that they learned quickly; there was a different one for everyday of the
week. An example of one can be viewed at [http://www.youtube.com/watch?v=zHBqn7iTLXo](http://www.youtube.com/watch?v=zHBqn7iTLXo).

Sometimes I would watch as they did punches while doing spelling, kicks while doing math facts and lunges in English. This type of physical activity within other subject matter areas became an everyday occurrence as evidence by the records the teachers kept using tracking charts that they turned into me on a monthly basis.

With all of these experiences that the students had, it was communicated to me by the teachers that it was their hope that their students continue their gardening experience in Second Grade. Not knowing if the Second Grade teachers would carry on their student’s experience, two of the First Grade teachers have made plans to help that become a reality. One said that she would do all the “leg” work to make it harder for them to say no and the other, who recently retired, has offered to return to school weekly, as a volunteer, to assist and help the Second Grade teachers and students in any way that she could to experience the garden again. This has been a refreshing experience for the all involved, especially me. It would be my hope to continue this project through a longitudinal study so as to allow for further study the effects of these collaborations on this low socio-economic school.
CHAPTER 5

FINDINGS

ABC Primary School is a school that can be described as one that serves a low socio-economic population. The buildings themselves are old and have limited modern amenities. The school district in this parish is undergoing many changes due to the fact that their budget has been reduced. As a result of the decreased budget, there has been a reduction in force across the parish. Layoffs, retirements, reassignments and the elimination of some positions have caused a great deal of stress. In some cases, administrators, teachers and school staff may be asked to do more with less.

With this facing the school district, it has become even more important that collaborations with agencies, businesses and community volunteers play an integral part in helping schools in the local community maintain programs and institute new ones that will benefit both the school and students. Developing and building collaborations that will help to achieve these goals take time and perseverance.

These collaborations are not all that is needed; there must be buy-in by those that will be served through the collaborations. Buy-in must be across the board; it does no good to have an administrator buy-in but not the principal and/or teachers. The same holds true for buy-in by teachers but not by the principal. It is extremely important for support to be given to those implementing a program and those who will carry it out.

The garden project that was implemented at ABC Primary School was a result of much collaboration made between agencies, businesses and the community. It would not have been possible without these collaborations, budget cuts or not. This project impacted the students of the three First Grade teachers in a number of different ways as evidenced in the responses given by the teachers during their interviews. It will be important for this project to continue so that the
impact can be fully seen in the next couple of years. The main ground work has been laid with the majority of expenses being incurred with this year’s project. In the future years, the expenses will be less, but the focus and importance of the project remains the same, hopefully with its positive impact on the students.

**Compiled Summary of Guiding Questions**

The researcher compiled and interpreted data collected from teacher interviews. The data has been compiled based on themes, similarities, differences and categories. The following is a summary of the guiding questions asked to the teachers who took part in the project.

1. **How long have you been teaching?**
   - All teachers that took part in this project have a variety of experiences. They also bring to their classroom, a difference in the number of years that they have taught, ranging from 6 ½ to 27 years.

2. **What degree do you hold?**
   - All have a Bachelor of Science degree; one is a former veterinarian.

3. **How would you describe the students that you teach?**
   - Respondents agreed that their students all come from low socio-economic families. This is supported by the fact that 79% are on free and or reduced lunch. One describes her students as underprivileged; another describes hers as at risk. Two agree that even with the challenges they face, they still have a willingness to learn and that using the hands on approach provides them with ownership and can give them a sense of accomplishment.

4. **Why did you want to get involved with a gardening project?**
   - All respondents wanted to do the gardening project because of the fact that they love to get involved. One respondent said that after hearing about what it would encompass, it seemed child-friendly and it paralleled healthy foods. Another stated that she figured it would get the kids excited and that it was something that they might experience for the first time. The third said that she loves to do anything outside and she has a garden at home. She also acknowledged that anything real world that kids can touch is such a motivating factor to learn.
5. What was the students’ initial reaction to the garden project?

- The responses to this question varied. One stated that they were excited while another said that at first it was not much of anything because they had no idea of what it involved. The third said that it was real; it brought it home to them because it (the garden) is not something that’s not attainable, even at home.

6. How do you think this project impacted the students?

- All teachers interviewed agreed that the project had a positive impact for the students. The hands-on learning, the correlations made to other subject matter areas and the connection to healthy living were mentioned as part of this positive experience by two of the respondents. Incorporating exercise into their subject matter areas, whether in writing as reported by one or reading as reported by the other, they were able to make the connection between healthy eating and exercise. One even told of her hope of them wanting to start a garden at home. The motivation for the students to behave in class and how it was used as a reward for that good positive behavior was the impact mentioned by the third.

7. How do you think this project affected their socialization/teamwork?

- All teachers interviewed spoke of the children lining up at recess to take turns watering the plants in the garden. Two also mentioned how well the students are doing in having learned to work together as a team and that they are more aware of what they are doing. The third teacher mentioned about how she uses the garden as a behavior incentive for doing or not doing things.

8. How do you think this project affected their willingness to try new foods?

- It was unanimous: all respondents agreed that the students’ willingness to try new foods has increased since the garden project. One respondent stated that watching what they planted, grow into edible things they could taste was fun. A second stated that is was fun because it is from our garden. Another described how harvesting food and cooking it for the children has increased their willingness to try new foods. It may be in different ways for different reasons, but nonetheless, more are trying and eating more of what is offered in the cafeteria.

9. How do you think this project impacted their consumption of fruits and vegetables?

- One respondent stated that it has helped in the consumption of good healthy foods even at home as reported by parents having told her that their child has actually asked for healthier foods at home. Another stated that more of her students are willing to try more of a variety and that they are more aware of where foods come from—their knowledge has increased. The third reported that her class is eating more fruits and vegetables in the cafeteria and are always getting her attention to tell or show her what they have eaten and how much.
10. What are your overall thoughts on this project?

- Respondents agreed that this project has added a new dimension to the students’ learning. One replied that it has been a wonderful extension of the classroom and she thinks the students don’t realize that learning is still a key purpose nor does she feel they know that they are learning. One day while talking about the garden and the foods they were growing one student made the statement “We lose fat by eating healthy vegetables” and this project is allowing them to make connections. A second stated that the students are increasing their consumption of fruits and vegetables and other healthy foods as supported by parent testimonials. She also said that there is a correlation being made that just as they take care of the garden, their body is theirs to be taken care of as well. The third respondent reported everything was perfect and wonderful; the outdoor learning area was so much more awesome than anything she was imagining in her head.

Compiled Summary of Probing Questions

Within the course of the interviews, some teachers were asked more probing questions determined by comments that they made while giving answers. These questions allowed them to expand their answers by sharing more personal experiences. Probing questions asked by the interviewer had the following responses:

1. What is your motivation for teaching?

- All respondents were asked this question. One responded that there is a great need and that she has a big connection between herself and these needy little creatures—I love them. Another said that it makes her feel like she is accomplishing something and the third stated that seeing what they can do, where they come from and where you can get them to go just by making them excited is my motivation.

2. Do you think any of the students had seen vegetables that they have eaten in the cafeteria grown at home?

- The respondent who was given this probing question said that some of her students had seen, but they were not made to notice that their mom or grandmother was cooking it. She comments on the answer to this question she asked her class one day: Where do beans come from? Wal-Mart was the answer. I know now they have an added dimension—they now know that beans come from a garden before they go to Wal-Mart.
3. Were your students surprised to see where and what some of the foods in the cafeteria looked like when it was growing in the garden?

- This teacher responded yes. They are now watching seed to plant to flower to produce. They are finding it fascinating because the winter vegetables that we had come from plants that we had planted. Now they are seeing the whole process.

4. Do they associate the garden with classroom learning?

- Only one respondent was asked this question and she said no, but eventually they will make it all connect. While they are having fun in the garden, they are learning; they are not thinking that in their little heads right now.

5. What is your hope for your class in regards to the garden next year?

- The respondent who was first approached concerning her buy-in to the original project was asked this question and responded: This is what I am thinking about doing because I can’t imagine them not doing this. If we don’t have a separate Second Grade garden, I am thinking about figuring out a way that they as Second Graders will have one of the two beds and the First Graders will have the other. We would somehow work together. I am hoping that the Second Grade teachers will buy into it and do it.

6. How willing do you think the second grade teachers will be?

- Her response: I’m hoping that they would be willing if we (First Grade teachers) do the leg work part and all they would need to do is like keep it going because those kids go to recess out on the same playground as First Grade, where the garden and outdoor learning area is located. I was thinking that if we gave all of the students in the First and Second grade the opportunity to feel ownership of the garden area, then they will take care of it together because it will belong to all of them. The Second Graders, since they have taken care of the garden this year, could be the role models for the First Graders next year which would provide a wonderful opportunity for mentoring and partnership.

- And she continued, I am picturing and hoping each year as they go on, there will be another something like the garden in their area. Then, as they (the students) come in each year, the upper grade teachers will then have a group that is trained and experienced in it so that when they move up, they carry their knowledge and all they need is a bed.

- Thank you so much because we could not have done this without you because financially we have no funds for this, so you gave us backing to be able to do this and give the kids an experience of a lifetime. The kids just took it and ran with it. I mean, it’s their garden and they love it.
As a final thought, the principal added that he recognized what a wonderful opportunity the garden project would be for the students to experience. He stated that this may be something that they never experience again. He explained that he and his teachers try to provide new learning opportunities for the students. The principal expressed his surprise at the fact that many students are more aware of what and how much they need to be eating when it comes to fruits and vegetables.

**Conclusions**

The garden project appeared to be a positive experience for all involved. The immediate buy-in from the two more experienced teachers made it easier for the less experienced to make the decision to become part of the project. The veteran teachers are using their years of experience to mentor this young teacher; so for her, it was an easy decision with two willing, well-experienced participants to help her. These teachers, all First Grade teachers, pulled together for the sheer purpose of allowing low socio-economic students the experience that this may end up being a once in a lifetime opportunity.

For the AgCenter agents, it was an experience that has given them the foundation that can be used to make this a model project in their parish. The collaborations that have been formed can be used in the future to build on this and future projects. The resources that have been identified and that are available are ones that can be called upon again.

The students who took part in this project experienced learning in a variety of ways. They know that their teachers and others in the community care about them and are willing to go beyond the call of duty for them to have an assortment of opportunities on which to build their educational foundation. The garden appeared to be a positive connection between teachers and parents. It provided teachers the chance to speak to parents about their child’s willingness to try
more foods as well as presented teachers with the occasion to discuss with parents other aspects of their child’s learning in a different way.

The community has something to be proud of as it relates to the school and the children. This has been the first step in a three-part plan to establish a back to the earth link with children and adults so that health issues can be recognized and addressed in the African American population. And all of this was set in motion by agents who initiated, developed and built collaborations between the local Cooperative Extension Service and the local community.

Need for Additional Research

The value of gardens in schools has been recognized. They have grown in popularity and expanded to all grade levels. Schools are identifying the needs that gardens can fulfill in the daily lives of students. Students are reaping the benefits that gardens provide. They are able to learn firsthand the importance of teamwork, collaboration, eating healthy and incorporating physical activity in the daily lives. Students are experiencing a wide range of vegetables and fruits regardless of their family’s income level. Gardens provide students with hands-on learning that they may otherwise never experience if not for the encounters at school.

Schools are not always able to financially support such projects. These types of projects require long-term financial support and commitment. Community collaborations between agencies, organizations and businesses can make available resources that schools in the community may require for such projects to become reality. One concern that may arise between these collaborators is the sustainability of the collaboration because of economic reasons, lack of interest or poor results from the experience. With the help of a coordinator, for example an extension agent, these collaborations can be made and maintained with the agent’s assistance. The buy-in by collaborators to such projects comes with the reputation of experience and researched-based information provided by the local extension office.
More research needs to be conducted over a longer period of time. This longitudinal study could provide much needed data that would substantiate the value that such collaboration can have over time. More research could also provide data that would not only support the need for community collaborations, but also the academic value and the impact on students’ health through long term exposure to fresh fruits and vegetables.
REFERENCES


Sanders, M. G. (2003). Community Involvement In Schools: From Concept to Practice. *Education and Urban Society, 35*(2) [http://eus.sagepub.com/content/vol35/issue2/]


APPENDIX A
LOGIC MODEL
LOGIC MODEL: Program Performance Framework

**SITUATION**

**INPUTS**
- Staff
- Volunteers
- Time
- Money
- Materials
- Equipment
- Technology
- Partners

**OUTPUTS**
- Activities: Workshops, Meetings, Counseling, Facilitation, Assessments, Product dev., Media work, Recruitment, Training
- Participation: Participants, Customers, Citizens

**OUTCOMES – IMPACT**
- Short term results are: Learning (Awareness, Knowledge, Attitudes, Skills, Opinions, Aspirations, Motivations)
- Medium term results are: Action (Behavior, Practice, Decision-making, Policies, Social action)
- Long term impact(s) is: Conditions (Social, Economic, Civic, Environmental)

**ENVIRONMENT**
Influential factors

---

University of Wisconsin-Extension-Cooperative Extension, E. Taylor-Powell, 1998

University of Wisconsin-Extension Cooperative Extension
APPENDIX B
COLLABORATION PROJECT IS ANNOUNCED
Collaboration Project is Announced

Belle Rose Primary School is one of eight schools in Louisiana that has been chosen to participate in the Healthier Options for People through Extension 2 (HOPE 2) Grant. This grant is sponsored by the W.K. Kellogg Foundation through the Mississippi Food Network in collaboration with the LSU AgCenter’s Family Nutrition Program (FNP). The grant requires a three year commitment by the schools that participate. The goals of the AgCenter’s HOPE 2:

1) Youth to adopt lifelong healthy eating patterns and physically active lifestyles
   a. Increase basic nutrition knowledge
   b. Understand the importance of physical activity
   c. Increase time spent in physical activity
   d. Increase intake of fruits and vegetables in the diet
   e. Learn about the digestive system of the human body

2) Parents and school staff to adopt lifelong healthy eating patterns and physically active lifestyles.

Assumption Parish FNP Agent Robin Landry and Assumption Parish 4-H Agent Margo Castro are working closely with Belle Rose Primary School Principal Damien Buggage (pictured above) and first grade teachers Grace Savoie, Sally Cancienne and Missy Hahn to get the first grade garden started. Local community volunteers and businesses have been working with the agents and school to make the “first” garden a reality. This is the first in a series of updates so stay tuned and WATCH US GROW!

For more information on this topic, contact Robin B. Landry, Assistant Extension Agent in your Assumption Parish LSU AgCenter Office at 369-6386 or rlandry@agcenter.lsu.edu.
APPENDIX C
BELLE ROSE STUDENTS TOUR BODY WALK
Students at Belle Rose Primary recently had the privilege of touring the Body Walk sponsored by the Assumption LSU AgCenter. Robin B. Landry, nutrition agent in the parish, schedules the Body Walk with the schools, conducts teacher trainings and student assemblies. The tour takes students through the life-size body as one of the 5 food groups while volunteers teach the groups of 10 about the importance of each organ. Students enter one ear of the head, sit in the brain as they learn about it, exit through the other ear and pick up the food that they become. Once they learn about the food groups, they enter the mouth and sit on teeth while they are able to participate in demonstrating their knowledge of good dental health. From there they tour the stomach, heart, small intestines, lungs, bones, muscles, skin and learn about germs. When they exit, they recall what they learn in the pathway to life exhibit.

For more information on this topic, contact Robin B. Landry, Assistant Extension Agent in your Assumption Parish LSU AgCenter Office at 369-6386 or rlandry@agcenter.lsu.edu.
APPENDIX D
WISERCISE
APPENDIX E
WATCH US GROW!
Watch Us Grow!

Summer’s almost here. School’s come to a close and so has the first year of Belle Rose Primary’s first grade garden experience. Teachers Grace Savoie, Missy Hahn and Sally Cancienne gave their students an experience of a lifetime—growing and eating fresh produce from the garden. The garden, made possible by two grants, the Family Nutrition Program’s Healthier Options for People through Extension 2 Grant (HOPE 2) and a Wal-Mart Foundation Grant (through 4-H) called Fit 4 the Future, and the collaborations with local businesses and community members set in motion by LSU AgCenter Extension Agents Robin Landry and Margo Castro allowed the students, many for the first time, to take part in planting, tending and eating fresh produce.

The garden began taking root in the summer of 2009 and has been sprouting and blossoming since then. The students’ garden produced typical fall crops of broccoli, spinach, carrots, cabbage, and the spring garden, crops of tomatoes, cucumbers, bell peppers, snap beans and watermelon that gave them the opportunity to taste vegetables from the garden both raw and cooked. Students harvested the vegetables, and teachers washed and prepared them for student consumption. Teachers prepared fresh broccoli and low fat ranch dip, lettuce and spinach salad with low fat cheese and low fat dressing, smothered cabbage, vegetable soup and carrot cake. Students also tasted and ate tomatoes, snap beans, and cucumbers from the spring garden.

The care of the garden has been the duty of the children, from planting to weeding and watering; the crops grew and have prospered under their care. For the students, the garden is an extended classroom. For the teachers, it has become a multi-purpose area used to teach lessons in all subject matter areas as well as helping students learn responsibility, citizenship, caring, and respect. In March, the garden was expanded with the addition of an outdoor learning area that was funded through a grant and built and installed, under an existing oak tree, by Mr. David Carlinos’s Ag Power Mechanics class at Assumption High School. With the addition of this outdoor learning area came other improvements to the garden that has enhanced its usability. They included a solar thermometer, rain gauge, hummingbird and wild bird feeders, bird baths, future fruit producing plants that included a Satsuma tree, a pineapple orange tree and a lemon tree in addition to blueberry and grape vines. This area has become one of pride for the first grade students as well as the faculty and staff. Many, including Principal Damien Buggage, have told how the vegetables in the garden provided them with a mid-morning or mid-afternoon snack while others expressed their pleasure in being able to sit under the shade of the oak tree and experience the beauty and solitude that this project has brought to the grounds of Belle Rose Primary School. In the cafeteria, teachers have seen an increase in the consumption of fruits and vegetables by the students. They now know that there is a direct correlation between eating healthy, being physically active and being healthy.

This garden project and learning experience for the first grade students was made possible not only by grant funds, but also because of the first grade teachers buy in and the collaborations that the agents made with local businesses and community volunteers. The generosity and commitment of local businesses by providing their employees, time and resources helped to make this project a success. The LSU AgCenter Agents and Belle Rose Primary first grade teachers and students would like to again take this opportunity to thank the following businesses and community members for their part in helping to make this happen: Lula Westfield, LLC,
Jamie Ponville Trucking, LLC, B and B Hardware and Garden Center, Dan Boudreaux Ace Hardware, LeBlanc Brothers Ready Mix Concrete Inc., Assumption Parish School Board, and Robert and Charlene Forrester. With the collaborations made, the garden project will continue to flourish and grow. We are looking forward to next year’s crop!

For more information on this topic, contact Robin B. Landry, Assistant Extension Agent in your Assumption Parish LSU AgCenter Office at 369-6386 or rlandry@agcenter.lsu.edu.
APPENDIX F
CHOOSING A GARDEN SITE
Creating a School Garden

Form collaborations that could possibly lead to sources of funding. Identify Volunteers and Businesses in the Community

Meet with School Principal to get buy-in and commitment followed by a meeting with teachers

Form a garden team. Identify a garden site coordinator.

Select an appropriate site at the school

Decide what type of garden (fruit, vegetable, organic, container, raised bed, in ground)

Meeting with Team, Volunteers, and Extension Agents to Sketch the Garden

Test Soil Collect soil sample, bring to LSU AgCenter Extension Office

Once the soil test results have been received and adjustments have been made schedule a garden workday.

Prepare Garden Site Till, construct, purchase containers

Schedule a Planting Day

Let the children plant!

PUBLICIZE and CELEBRATE

This material was funded partially by USDA’s Supplement Nutrition Assistance Program. The SNAP Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out how to apply, call 1-888-HELP-1PLU or visit: www.dss.state.la.us to download an application for SNAP

Issued in Furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with USDA. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.
Students in Mr. David Carlino’s Ag Power Mechanics Class at Assumption High School constructed the outdoor learning area that will presented to Belle Rose Primary School as part of the HOPE 2 and Fit 4 the Future grant programs that the school is participating in during this school year. The students, seated left to right, Troy Landry, Avery Leonard, Billy Richard, John Meyer and Whitney Sampey, not only constructed the raised area learning center, but also installed it. Mr. Carlino and the Ag Mechanics students did a skillful job of adding benches which will provide a sitting area for students when taking part in classes that will incorporate the nearby garden into all subject areas. Assumption Parish AgCenter Agents Robin B. Landry (Nutrition) and Margo Castro (4-H) have been working with the teachers and students promoting the importance of eating fruits and vegetables and moving more as part the health issue facing Louisiana with its high childhood obesity rate. For more information you can contact the agents at rlandry@agcenter.lsu.edu or mcastro@agcenter.lsu.edu.
APPENDIX H
PRESENTATION INVITATION
You are invited
to the introduction of
a new classroom experience…

The Outdoor Learning Center
at
Belle Rose Primary School
on
Tuesday, March 16, 2010
at 10:00 a.m.

Come and experience
an innovative way
of incorporating
nutrition, healthy eating
and gardening into
the educational curriculum
APPENDIX I
GARDENING SONG
Row, Row, Row Our Dirt
(Sung to the tune of Row, Row, Row Your Boat)

Row, row, row our dirt,
Keep your seeds all straight.
Let the sun and rain come down.
Our planting can’t be late.
Pick, pick, pick our crop,
Harvesting is near.
It’s been fun to see it grow,
And picking time is here.
Eat, eat, eat our crops,
Salads steamed or soup.
Learning’s been fun, one by one,
Or in our first grade group!

Written By: Sally Cancienne, 1st grade teacher
VITA

Robin Boudreaux Landry was born in Donaldsonville, Louisiana. She graduated from Ascension Catholic High School in 1977. Robin earned a Bachelor of Science degree in vocational home economics education from Nicholls State University in 1981. In August 2010, she will graduate from Louisiana State University with a Master of Science degree from the School of Human Resource Education and Workforce Development.

Robin has been married to Keith P. Landry for 29 years. They have two children, Emily and Brett, and live in Donaldsonville, Louisiana.

In the fall of 1981, Robin was hired by the Diocese of Baton Rouge to teach at Ascension Catholic High School, her alma mater, where she taught for eight years. In the fall of 1989, her career changed directions when she was hired as a middle school teacher at St. Elizabeth School.

Then in 2006, Robin was hired as an extension agent in Assumption Parish by the Louisiana State University Agricultural Center. When hired, she became the South Central Crescent Region’s Family Nutrition Program Regional Contact. In 2009, she was chosen to be the South Central Crescent Region’s Family and Consumer Sciences Regional Coordinator.

Robin has served as president of the Nicholls State University Home Economics Association, state parliamentarian for the Louisiana Home Economics Association, and presently serves as Southeast Alternate Regional Director for the Louisiana Extension Association of Family and Consumer Sciences.

In her parish, she serves on the Head Start Policy Council and the Head Start Health Advisory Board. She serves her church as a lector, commentator, extraordinary minister, minister to the homebound and is on the Liturgy Committee.

Currently, Robin is a member of the National Extension Association of Family and Consumer Sciences (NEAFCS), Louisiana Extension Association of Family and Consumer Sciences.
Sciences (LEAFCS), Epsilon Sigma Phi (ESP) and Gamma Sigma Phi National Honor Society. Robin has recently co-presented a Share Fair Session at the 2010 Priester National Extension Health Conference in Mobile, Alabama. In August 2010, Robin will co-present a poster session at the Louisiana Extension Association of 4-H Agents on her collaborations concerning her garden project.