FACTORS CONTRIBUTING TO COMMUNITY SUPPORT FOR
AGRICULTURE EDUCATION PROGRAMS

A Thesis
Presented
to the Faculty of
California State University, Chico

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Agriculture Education

by

© Wesley Christine Hunt 2015

Spring 2015
FACTORS CONTRIBUTING TO COMMUNITY SUPPORT FOR
AGRICULTURE EDUCATION PROGRAMS

A Thesis

by

Wesley Christine Hunt

Spring 2015

APPROVED BY THE DEAN OF GRADUATE STUDIES
AND VICE PROVOST FOR RESEARCH:

___________________________________________
Eun K. Park, Ph.D.

APPROVED BY THE GRADUATE ADVISORY COMMITTEE:

______________________________  _________________________________
Mollie Aschenbrener, Ph.D.         Mollie Aschenbrener, Ph.D., Chair
Graduate Coordinator

______________________________
Michael Spiess, Ed.D.

______________________________
Brad Dodson, Ph.D.
PUBLICATION RIGHTS

No portion of this thesis may be reprinted or reproduced in any manner unacceptable to the usual copyright restrictions without the written permission of the author.
DEDICATION

I would like to dedicate this study to my parents, Mary Lynn and Dennis Hunt, who have been supportive of my furthering education since day one.

They both have worked incredibly hard to always instill work ethic and the importance of education in both myself and my brother. Without their encouragement I would not be where I am today.

Thank you.
ACKNOWLEDGMENTS

The writer expresses her sincerest appreciation to Dr. Mollie Aschenbrener, her graduate advisor for guidance and encouragement throughout the study.

Special thanks to the agriculture teachers of the North Coast region. Without their participation and support, this study would have not been possible.

Additionally thanks to, fellow agriculture teacher, Natalie Ryan, for her constant support and inspiration in addition to my parents for their push to pursue higher education. Lastly, many thanks to Jill D. Damskey for her encouragement and research guidance.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>GAS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication Rights</td>
<td>iii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>v</td>
</tr>
<tr>
<td>List of Tables</td>
<td>viii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>ix</td>
</tr>
<tr>
<td>Abstract</td>
<td>x</td>
</tr>
</tbody>
</table>

CHAPTER

I. Introduction .............................................................. 1
   Background ................................................................. 1
   Statement of the Problem ........................................... 2
   Purpose of Study ......................................................... 2
   Definition of Terms ..................................................... 3
   Limitations of the Study .............................................. 5

II. Literature Review .......................................................... 6
   Education ................................................................. 6
   Inquiry Based Education ............................................ 9
   Need for Agriculture Education ................................. 11
   Model of Agricultural Education ................................. 12
   Agriculture Education Model ..................................... 13
   Experiential Learning ............................................... 16
   Agriculture Education as Science .............................. 18
   Need for Community Support ................................. 19
## CHAPTER III. Methodology

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>24</td>
</tr>
<tr>
<td>Objectives</td>
<td>25</td>
</tr>
<tr>
<td>Population</td>
<td>25</td>
</tr>
<tr>
<td>Validity and Reliability</td>
<td></td>
</tr>
<tr>
<td>Instrument</td>
<td>26</td>
</tr>
</tbody>
</table>

## IV. Findings and Results

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation of Findings</td>
<td>27</td>
</tr>
</tbody>
</table>

## V. Conclusions

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conclusions</td>
<td>32</td>
</tr>
<tr>
<td>Implications</td>
<td>35</td>
</tr>
</tbody>
</table>

## References

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Informed Consent</td>
<td>45</td>
</tr>
<tr>
<td>B. IRB Application</td>
<td>47</td>
</tr>
<tr>
<td>C. Survey</td>
<td>53</td>
</tr>
<tr>
<td>D. Human Subjects Post Data Collection Form</td>
<td>57</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Level of Contribution to the Local Agriculture Education Program</td>
<td>30</td>
</tr>
<tr>
<td>2. Local Support Criteria</td>
<td>31</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diagram of the Agriculture Education Model</td>
<td>14</td>
</tr>
<tr>
<td>2. Affiliation to the Agriculture Education Program</td>
<td>28</td>
</tr>
<tr>
<td>3. Time of Affiliation in a Professional Capacity</td>
<td>28</td>
</tr>
</tbody>
</table>
ABSTRACT

FACTORS CONTRIBUTING TO COMMUNITY SUPPORT FOR AGRICULTURE EDUCATION PROGRAMS

by

© Wesley Christine Hunt 2015

Master of Science in Agriculture Education

California State University, Chico

Spring 2015

Currently, over 11,000 agriculture teachers instruct students in the areas of agriscience, biotechnology, horticulture, animal science, environmental science, and agriculture mechanics. The nation instructs over 800,000 students in formal agriculture education programs from seventh grade through adult school in 50 states and three U.S. territories. Students pursuing a future in the industry of agriculture need access to instruction and materials pertinent to the current global agriculture industry, which continues to evolve (Vaughn, 1999). Working with administration and district personnel to ensure their understanding of agriculture education’s importance is a direct correlation of community support. The main purpose of study is to identify factors that contribute to community support of agriculture education programs. The population of this research included agriculture administrators and Agriculture Advisory/Ag Boosters members. The target population, accessed through a purposive sample, included schools and
communities of the North Coast Region. Survey results indicated 83.33% \((n=10)\) of the respondents were agriculture booster or agriculture advisory members. The other respondents include administrators which were 16.67% \((n=6)\). When surveyed on a scale of 5 (strongly agree) to 1 (strongly disagree), respondents gauged their level of contribution through their current level support. Nearly 70% of respondents agreed to strongly agree to all questions that aimed to gauge their level of support. The majority of respondents believe they support their local agriculture education program through contributions of supplies to classroom/SAE/FFA, along with spending time and providing expertise with SAE projects, Community Service participation, FFA involvement above the chapter level, chaperone and drive to leadership conferences, participation in committees and participation above the chapter level.
CHAPTER I

INTRODUCTION

Background

Agriculture education in the United States has long served as the foundation for inspiring students to pursue agriculture careers. Currently, over 11,000 agriculture teachers instruct students in the areas of agriscience, biotechnology, horticulture, animal science, environmental science, and agriculture mechanics (National FFA Organization, 2013). The nation instructs over 800,000 students in formal agriculture education programs from seventh grade through adult school in 50 states and three U.S. territories. Nearly 10% of these students reside in California alone (National Council for Agriculture Education, 2013). With more than 21 million American workers (15% of the total U.S. workforce) producing, processing and selling the food and fiber of the United States, it is imperative that agriculture education establishments continue to thrive (American Farm Bureau Federation, 2015). Agriculture education is the foundation for students who will seek future employment connected to the agriculture industry. Today’s farmers produce 262% more food with two % fewer inputs like labor, seed, feed, etc. when compare to 1950 (American Farm Bureau Federation, 2015). Given the vast differences in the agriculture industry, students leaving agriculture education programs must have viable backgrounds in many facets of the industry while being flexible to overcome changes that may threaten future food production.
Statement of the Problem

Rosco Vaughn (1999), Executive Director of the National Council for Agriculture Education, stated that agriculture education is crucial for the future and that there are some important factors of ensuring a successful future:

To ensure we meet the needs of the agricultural industry and a more diverse customer population, teachers must think globally but be empowered locally. To best meet the needs of students, our programs must become more "community-based." Teachers can empower themselves locally by bringing a wide range of community stakeholders together to determine the type of agricultural education program the community needs and wants for their students. (p. 5)

This statement by Dr. Vaughn suggests the importance of utilizing the community and their resources. Students pursuing a future in the industry of agriculture need access to instruction and materials pertinent to the current global agriculture industry, which continues to evolve (Vaughn, 1999). Because agriculture education constantly battles for funding from the state legislator, programs must work diligently in local communities to establish relationships with businesses, farmers, politicians and with people of influence to ensure the viability of agriculture education for future years. Thus, it is essential to research community support of agriculture education programs and determine commonalities while identifying and interpreting how community support is measured.

Purpose of Study

Throughout the years of agriculture education at Healdsburg High School, many agriculture educators have been employed. During this constant revolving door of teachers, the community has always maintained constant support for the students, teacher, school and program. Collecting data in the North Coast Region of agriculture advisory
committees and booster group members will hopefully established a pattern to determine how community support is measured and interpreted.

This study could be increasingly important for newer programs that are seeking community support or established programs that are looking to build community support. This study will examine high schools and communities of the North Coast Region, consisting of Alameda, Solano, Contra Costa, Marin, Sonoma, Napa, Mendocino, Lake, Humboldt, and Del Norte counties in Northern California. These schools with agriculture education programs are located in separate communities that all specialize in different agriculture sectors.

With agriculture education constantly struggling to maintain growth, enrollment numbers and funding, programs need to find people of influence to ensure the viability of agriculture education for future years. Additionally, working with administration and district personnel to ensure their understanding of agriculture education’s importance is a direct correlation of community support. The main purpose of study is to identify factors that contribute to community support of agriculture education programs.

Definition of Terms

Agriculture Education Program

A program or department which serves to excel in agriculture education courses, FFA instruction and competition, and oversees supervised agriculture experience programs (California FFA Association, 2013).
Agriculture Education Teacher

One who instructs students about agriculture towards graduation from high school, who teaches students industry skills and prepares them for career and college (California FFA Association, 2013).

CDE

Career Development Event (California FFA Association, 2013).

FFA

National FFA Organization, a national youth organization embedded within middle and high school agriculture education programs (National FFA Organization, 2013).

FFA Chapter

A school organization that involves FFA members, advisors, officers and works with the State and national organization to implement official FFA functions (California FFA Association, 2013).

NAAE


SAE

Supervised Agricultural Experience (National FFA Organization, 2013).
Limitations of the Study

This study was conducted with agriculture advisory/boosters, and administrators of high school agriculture programs. The population of the study included agriculture programs in the North Coast Region of California. The region includes, Alameda, Solano, Contra Costa, Marin, Sonoma, Napa, Mendocino, Lake, Humboldt, and Del Norte counties. The survey was completed by willing participants of agriculture programs in these counties. This study was limited to the advisory/booster members of their programs and the administrators selected by the local agricultural teachers in these schools. As such, the study utilized a purposive sampling method. No other individuals were included in this research study. Data collected could be separated and analyzed by test group population. Further studies should investigate, connections of program success with community support as well as student perception of community support in programs. Replications of this study should alter the instrument to include additional items. The survey instrument could include items inquiring about how community members measure program success, or focus specifically on students and their perceptions of community support. The survey scale could also be changed to a 4-point or 6-point scale with no option of a Neutral/No opinion response.
CHAPTER II

LITERATURE REVIEW

Education

Education has undergone many stages of policy and transformation. According to the U.S. Department of Education (2012), education is primarily a state and local responsibility and it is up to states and communities to establish schools and colleges, develop curricula, and determine enrollment and graduation requirements. The original Department of Education was established in 1867 with responsibilities of collecting information on schools and teaching.

The Library of Congress suggests The Morrill Act, was sponsored by Vermont Congressman Justin S. Morrill (2015). The Act was signed into law by President Abraham Lincoln in 1862. The Library of Congress explains the Act was titled "An Act Donating Public Lands to the Several States and Territories which may provide Colleges for the Benefit of Agriculture and the Mechanic Arts," (2015). It established 30,000 acres of Federal land for each member in their congressional delegation, to fund public colleges that focused on agriculture and mechanical arts (The Library of Congress, 2015). The Morrill Act contributed to the establishment of 69 land grant colleges (The Library of Congress, 2015).

Following this monumental event, the Second Morrill Act was passed in 1890, added the responsibility of administering support for land-grant colleges and universities
for the Department of Education (United States Department of Education, 2012). Herren and Edwards (2002) stated “millions of students have completed undergraduate, graduate, and professional degrees, and then entered the work force, and have subsequently enriched and enlightened their communities, regions, states, and our society”, which are all benefits of land-grant universities (p. 88). Additionally, Herren and Edwards explained, “The concept for the land-grant model was an evolutionary process that developed out of the need for a maturing nation to educate its citizens to cope and excel in a world that was changing faster that it had ever changed before” (p. 95).

Similar legislation would continue to address agricultural issues. In 1917, the Smith-Hughes Act and the George Barden Act of 1946 focused on agricultural, industrial and home economics in secondary education. Legislative actions continued following World War I. According to the Department of Education, World War II expanded federal support for education, which was then followed by the first set of comprehensive federal education legislation stimulated by the Cold War (United States Department of Education, 2012). The United States Department of Education now reaches nearly 14,000 school districts and 56 million elementary and secondary students (United States Department of Education, 2012).

More recently in education, new policies and legislation has been introduced. The No Child Left Behind Act (NCLB), is the compilation of over a decade of standards based reform and education policy. According to Jack Jennings and Diane Stark Rentner (2006) the ten major effects of NCLB include:

State and district officials report that student achievement on state tests is rising, which is a cause for optimism. It’s not clear, however, that students are really gaining as much as rising percentages of proficient scores would suggest. Schools
are spending more time on reading and math, sometimes at the expense of subjects not tested. Schools are paying much more attention to the alignment of curriculum and instruction and are analyzing test score data much more closely. Low-performing schools are undergoing makeovers rather than the most radical kinds of restructuring. Schools and teachers have made considerable progress in demonstrating that teachers meet the law’s academic qualifications — but many educators are skeptical this will really improve the quality of teaching. Students are taking a lot more tests. Schools are paying much more attention to achievement gaps and the learning needs of particular groups of students. The percentage of schools on state “needs improvement” lists has been steady but is not growing. Schools so designated are subject to NCLB sanctions, such as being required to offer students public school choice or tutoring services. The federal government is playing a bigger role in education. NCLB requirements have meant that state governments and school districts also have expanded roles in school operations, but often without adequate federal funds to carry out their duties. (p.110)

Additionally, the NCLB has provided greater attention to the content being taught and the method of teaching. Low-performing schools are also receiving greater attention. The qualifications of teachers are coming under greater scrutiny. Concurrently with NCLB, scores on state reading and mathematics tests have risen (Jennings & Rentner, 2006). The report entitled “The Condition of Education 2014” stated the number of students in elementary and secondary schools is expected to grow to 52 million by 2023.

Postsecondary enrollment was at 21 million students in 2012, including 18 million undergraduate and 3 million graduate, or post baccalaureate, students (Kena et al., 2014). This means that education continues to expand with the growing population. Not only are high school education statistics growing with 3.1 million public high school students receiving a diploma in 2012, over 1 million associate's degrees, 1.8 million bachelor's degrees, and over 750,000 master's degrees were awarded, showing an increase in higher level education (Kena et al., 2014).

Many states and districts are revolutionizing their education systems to address the changes in populations. One example of that is Place-Based education.
MacEachren (2011) discussed the role of making stuff in place-based education and stated:

"Education that enriches our sense of place will flourish when curriculum activities involve making the stuff of life from the material available in the very places we live. By recognizing and then fulfilling the need to make the practical items of daily life, the experiences that focus on the forms and designs that have served our ancestors so well can once again become common knowledge." (p. 13)

Place-based instruction provides a lens to place subject matter into context and becomes both a pedagogical approach and a learning outcome (Brooke, 2003). It considers, and values, the background of the community and history of the learners as well as the learners themselves. According Gautreau and Binns (2012), who investigated student attitudes and achievements, an environmental place-based inquiry in secondary classrooms, one of the goals as educators is to foster an interest in learning. However, it can be argued that the central goal as an educator is to help students learn, and apply themselves whether to subscribe to a behaviorist, cognitivist, or constructivist model of education.

Inquiry Based Education

Self-regulation and motivation, two factors that influence student learning, are tied to metacognition (Gautreau & Binns, 2012). A major goal of education is to create self-regulated learners, students who understand how they learn and take responsibility for their learning (Seraphin, Philippoff, Kaupp, & Vallin, 2012). Within the science curriculum, many have begun utilizing the Teaching Science Inquiry methods, which has five phases in its model. These phases include initiation, invention, investigation, interpretation, and instruction (Seraphin et al., 2012). This model could be used in all
disciplines and is helping move education into the path of inquiry-based education prominent in California and other state education systems. In a public agenda by Johnson (2012), current education was discussed and the solution was broken into multiple approaches.

The major problem in American education today is that we aren’t really challenging students, teachers or principals to do their best. Too often, the curriculum is not demanding and falls far short of world-class standards. Districts accept lackluster teaching rather than systematically identifying and rewarding the best educators and working hard to improve the performance of the rest. Schools should set clear standards for students, teachers and principals and carefully monitor their performance to ensure that they’re making progress. (para. 14)

Additionally, the second approach is to give more of a choice for education. Johnson (2012) discusses this by explaining

Given the problems in public schools today, parents should have the freedom and wherewithal to send their children to private or charter schools or to better-performing traditional public schools if they want to. This would be especially helpful for families living in communities with seriously troubled public schools, and it encourages creative and dedicated educators to develop new, more innovative kinds of schools. What’s more, the competition among schools will encourage more public schools to adopt best practices and really focus their efforts on serving parents and students—not on maintaining the status quo. (para. 20)

The third approach addresses community. Johnson outlines,

Most of the problems facing the public education system stem from its commitment to educating every child, including those who come from poor homes and troubled neighborhoods, those who don’t speak English, and those who have special needs. As a country, we’ve never invested the adequate, properly-targeted funding to give these children the kind of intensive support and services they need. We also haven’t provided the robust community involvement that’s required to help struggling schools succeed. Until we do, public schools will continue to struggle, and in turn, so will our economy. We simply won’t have enough well-educated workers to succeed in the new global economy. (para. 27)
While schools continue to grow and education continues to change based on school reform and standards based teaching, many schools will need to provide the same education to students regardless of prior knowledge, skills, resources or community.

Among the new methods of education in the United States, the Common Core State Standards (CCSS) were developed in 2009 by state leaders such as governors and state commissioners. According the official website of the CCSS,

The Common Core is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live (Common Core State Standards Initiative, 2015).

The standards are divided into two categories, first are college and career readiness standards that address what students should know as they finish high school. The second category is to create expectations for students while they are enrolled in school from kindergarten all the way till 12th grade (Common Core State Standards Initiative, 2015). According to the original timeline created for the CCSS development process, by June 2014, 43 states have adopted the standards and should be implementing the standards at the local level (Common Core State Standards Initiative, 2015).

Need for Agriculture Education

Herren and Edwards (2002) noted that “a result of the efforts of land-grant institutions, American agriculture and related life sciences have developed into one of the great marvels of the modern world” (p. 88). According to Croom (2010), organizations and societies began promoting agriculture education outside of the formal school
establishment in the mid to late eighteenth century. Following the Morrill Act, which established the land grant institutions, Herren and Edwards (2002) explain,

That is, just as America’s government was designed “of the people, by the people, and for the people,” with the emergence of land-grant universities, education was now also of, by, and for the people. Henceforth, a college education was no longer only a domain of the upper classes, whose comparatively higher level of formal learning and accumulated wealth had perpetuated social and economic class lines for centuries. Higher education was now for the common people as well; who, armed with an education, could realize their dreams of a better place in society. Optimistically, the new concept of higher education in agriculture and the mechanic arts ushered in the need to create new knowledge that then could be applied to making life better for all citizens. (p. 95)

The Smith Hughes Act was the first U.S. legislation that provided federal aid to states for the purpose of promoting vocational education prior to college (Smith Hughes Act, 2015). Many supporters of vocational education, including businessmen and labor unions, saw the legislation as a solution to problems of skilled-labor shortages and unemployment in a rapidly industrializing society (Smith Hughes Act, 2014).

Model of Agricultural Education

With the constant change of agriculture education enrollment and curriculum, the foundation of agriculture education goes beyond the classroom because of its incorporation of leadership and hands on learning. FFA was established and organized nationally in 1928 in Kansas City, Mo and in 1950, Congress granted FFA a federal charter that made it an integral part of public agriculture instruction under the National Vocational Education Act (National FFA Organization, 2015). Additionally, National FFA has grown since its induction in 1928 and continues to serve members all over the nation.
FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. FFA membership today is comprised of 610,240 student members in grades seven through 12 who belong to one of 7,665 local FFA chapters throughout the United States, Puerto Rico and the U.S. Virgin Islands. (National FFF Organization, 2015)

In a study by Martin and Kitchel (2014), they analyzed urban students in agriculture education in regards to culture, in which the leadership organization allowed,

The members cited a heightened sense of cultural awareness while walking around the National FFA Convention Career Expo. The awareness was typically their curiosity about people from different places; however, the members did spend time unpacking their own culture and contemplating the interesting aspects of other cultures. (p. 179)

Additionally, Martin and Kitchel concluded that “urban FFA members may develop greater connections to FFA if they participate in more programs focusing on personal development and community service” (Martin & Kitchel, 2014). This connection to the FFA would allow further support later in a member’s life and understanding community.

Agriculture Education Model

According to Croom (2010), agriculture education involves the interrelationships between classroom and laboratory instruction, supervised agricultural experience (SAE), and agriculture leadership participation. However, he questioned if the model is composed in such a way (see Figure 1) that classroom instruction, FFA, and SAE are integrally linked and equally weighted components, then why do the FFA and SAE components generally subordinate themselves to instruction (Croom, 2010)?

The evolution of agriculture education programs must continue to meet the growing needs of students in the 21st century (Hughes & Barrick, 1993). The model reflects the evolution need for agriculture education in secondary schools, while showing
and expansion of concepts and outcomes designed to serve a diverse range of students more effectively (Hughes & Barrick, 1993).

With the passage of the Smith-Hughes Act in 1917, the national coordination of agricultural education naturally made it convenient for the development of an organization for personal growth and development (Croom, 2010). The National FFA Organization (FFA) which was formed in 1928 to encourage social development and agricultural skill development. While the components of the agriculture education model originated at different times in history, they were developed simultaneously (Croom, 2010).

According to Briers, Lewis, Murphy, and Rayfield (2012), “many programs are defined by quality indicators such as success in career development events or national chapter awards, but little attention has been given to identifying or measuring the
“innovativeness” of programs that are serving a totally different audience than traditional agricultural education programs serve” (p. 38). Additionally, Lynch (2000) suggested there are some common characteristics that programs of an exemplary nature share:

(a) high academic standards; (b) integrated rigorous academic content with real-world applications; (c) authentic student assessment; (d) adequate resources to ensure student success; (e) school-supervised service- and work-based learning opportunities; (f) highly qualified teachers; (g) partnerships with the community and stakeholders; and, (h) a school-within-a-school environment often achieved with a team approach through an integrated professional, career, or applied major. (p. 1)

Similarly, discipline of knowledge shares a common set of characteristics within a community of persons. These characteristics of a discipline include a tradition of practice, a conceptual structure, a specialized language, a set of beliefs, and a network of communications (Seraphin et al., 2012). The agriculture education model reflects the response of agricultural education to recent recommendations for education and to the needs of today’s agriculture student as dictated by changes in the agricultural industry, student population, society, work place, and education system (Hughes & Barrick, 1993).

Supervised Agricultural Experience (SAE) projects are hands-on experiences in which students work, research or grow livestock or horticultural projects. Limited research has been done to define SAE program quality or how they should be measured and evaluated (Dyer & Osborne, 1996). However, substantial research has been conducted pertaining to “SAE programs in an effort to aid program partners in administering effective SAEs” (Dyer & Osborne, p. 24). These partners can include community partners and industry professionals. According to the National FFA, FFA members collectively earn more than $4 billion annually through their hands-on work experience (National FFF Organization, 2015). Not only are students actively working towards careers through hands-on
experience, but they are also able to participate in career development events. “Through 25 national career development events and one activity, FFA members are challenged to real-life, hands-on tests of skills used to prepare them for more than 300 careers in agriculture” (National FFA Organization, 2015). These experiences are unique to the National FFA and state FFA organizations. The phenomenal industry support that is provided to agriculture education through the outlet of FFA is uncompromised and actually increasing every year, with more than $23 million in financial support to support agriculture education programs, activities and scholarships (National FFA Organization, 2015). This industry support is just the beginning of community support for agriculture programs throughout the country. This hands-on experience provides relevance to the educational process for many students (Cheek, Arrington, Carter, & Randall, 1994). Additionally, Cheek et al. (1994) recognize and studied the correlation of SAE projects and student achievement.

The value of experiential learning in agricultural education has long been recognized as an important part of the educational process. Through practice and experience students apply what they have learned in real situations, thus the material becomes understandable and usable. Moreover, in the process of gaining experience, new problems and situations arise causing learners to seek additional information and new ways of applying what they have learned (p.1)

Experiential Learning

Experiential learning in various settings has been a foundational component of secondary agricultural education since its inception (Cheek et al., 1994; Smith-Hughes Act, 1917). Many agriculture teachers have ample opportunity to provide students with laboratory experiences that enhance skills associated with scientific literacy and agriscience education, as their access to these agricultural laboratories is currently high.
The cyclical nature of the experiential learning process allows for experiences to be repeated in order to enhance learning (Myers & Shoulders, 2013). Additionally, Roberts (2006) suggested, “agricultural education programs at both the secondary level and the broad family of agricultural education at the university level (teacher preparation, agricultural communications, and agricultural leadership) yields a plethora of experiential learning practices” (p 17). It appears agriculture educator understand the impact of experimental learning. For example, over half of the respondents in an exploratory study that documented teachers’ use of experimental learning, reported using agricultural laboratories to engage students in activities associated with the first three stages of the experiential learning cycle, which include concrete experience, reflective observation and abstract conceptualization (Myers & Shoulders, 2013). Myers & Shoulders also noted that the most frequently omitted stage of experimental learning by teachers is active experimentation. While often included in the theoretical frameworks of studies in agricultural education, experiential learning has rarely been the subject of measurement in agricultural education (Myers & Shoulders, 2013). Roberts (2006), also broke learning models into three types, experiential learning, problem-solving, and inquiry-based, which he concluded:

In experiential learning, learners reflect on what they experienced, while in other models, learners further explore the phenomenon. In the third stage, all three models involve developing a theory, solution, or explanation, followed by the fourth stage in which that theory, solution, or explanation is tested. Experiential learning differs from the other models in that it does not have a formal evaluation stage. However, given the cyclical nature of experiential learning, evaluation indirectly occurs through subsequent experimentation, reflection, and generalization (p. 23)
Agriculture Education as Science

In 1988, the National Research Council gave charge to researchers to define methods necessary to guide educators as they updated their curriculum to make agriculture education more science based (Thompson, 2001). More specifically, Buriak (1992) defined agriscience as, “instruction in agriculture emphasizing the principles, concepts, and laws of science and their mathematical relationships supporting, describing, and explaining agriculture with a foundation in biological and physical science” (p. 4). Agriscience became a connection for career technical education. Upon the arrival of the 21st Century, the need for career and technical education (CTE) reformation was evident in order to prepare students for employment and higher education (Lynch, 2000). For example, Buriak (1992) noted that because of the agriculture industry becoming more technologically based, the links to science become stronger and “if we are to prepare future agricultural leaders for the world society, our product needs to be literate in the science controlling and explaining the technology, and how it interfaces with agriculture, not just the biological side to agriculture” (p.23).

Beyond the classroom, others have identified the need for agricultural education. In a speech given at the 2010 National FFA Convention, the United States Secretary of Education, Arne Duncan expressed the need for agriculture education in all schools. He stated,

My message to you today is simple. We need you. Our nation needs your skills and talents to compete and prosper in the global economy. Our communities need your leadership and commitment to civic engagement to thrive. And our families need you to succeed in college and careers—so that one day you can support your own families and strengthen your own community.
Education is like a seed. It is not planted just so it can grow and be harvested. With hard work, education takes roots. It replenishes. It nurtures a lifelong love of learning. It is truly a gift that keeps on giving. (2010)

He further postulated that agriculture, as America’s largest employed, must lead the way for the U.S. economy to rebound and grow. However, this can only occur when agriculture education prepares students for careers and college (Duncan, 2010).

To answer the call for future agriculturists from secondary students, an executive summary by Foster, Lawver and Smith (2014), titled the National Agriculture Education Supply and Demand study, analyzed the need for agriculture educators to teach those students. The study collected information, because “stakeholders in the agricultural education profession need current, accurate estimates of the supply and demand for teachers of Agricultural Education to provide for meaningful policy decisions” (Foster et al., 2015). The need for agriculture education is not just for expansion or growth of programs. According to Foster et al., (2015):

Despite program growth, 27 of 47 states reported a loss of programs or positions since 2011. On average, 67 positions and 45 programs were lost each year. Respondents from 39 states reported a total of 739 school based agricultural educators who taught in the 2013-2014 school year would not be returning to the classroom in 2014-2015. (“Key Findings,” para. 3)

Need for Community Support

Until the late 19th century, communities exerted an enormous influence on children, both in terms of what they learned and what values they developed (Patterson & Horwood, 1995). Changes in the 20th century, where larger numbers of students remained enrolled in school for longer periods of time, the isolation from the community became greater. Through the last quarter (approximately) of the 20th century, there has
been a significant interest in involving the community more actively with the school, and vice versa (Patterson & Horwood, 1995). Schaefer–McDaniel (2004) wrote of the importance of community in social capital, noting that sense of belonging to a community forms a significant part of a young person’s social capital framework. One example of providing resources and investing in social capital may be viewed through the FFA organization. The National FFA Foundation has raised more than $201 million and over 3,000 sponsors provided more than $14 million for FFA and agriculture programs and activities (California Agricultural Education, 2011).

Connecting community can also be viewed through adult organizations that support the FFA model. For example, Masser, Falk, and Foster (2014) suggested “Agricultural education, advisory councils are the entities that bridge this gap between the community and the local school” (p. 116). They determined that, “advisory councils, also known as advisory committees or boards, are a selected group of business, community, and school stakeholders who provide input on the planning, development, implementation, and operations” (p. 116) for programs. The conclusion to their study was that “approximately 90% of the respondents and 87.6% of programs indicated that an active advisory council was in place, which aligns with the nationwide average” (p. 126). For schools that reported no advisory council, the barriers noted indicated that teachers did not have time to organize an advisory council or that the program was new and the teacher was in the process of organizing a committee (Masser et al., 2014). Masser et al. also documented that,

Advisory councils were reported to have the highest level of influence on acting as a communication link between the general public and the program, identifying facility needs, determining the objectives of the agriculture program, determining
courses to be offered, and providing recommendations to the local school board. (p. 127)

In addition to leadership organizations, community support includes support from administration. Administrator support is crucial to program development and expansion because they can philosophically see value in the integration and that it will benefit student learning (Thompson, 2001). Briers, Lewis, Murphy, and Rayfield (2012) collected data where the majority of their test population agreed or strongly agreed that innovative agriculture education programs involve not only students but also, teachers, administrators, professionals in the community, parents, community partnerships, superintendents, agriculture businesses, FFA alumni, board of education in addition to industry representatives.

Jacobson (2011), studied a similar type of community support for Art programs in Sonoma County and dissected the types of support that were used to compensate for the lack of state funding for art programs. She examined the community support in local schools combined with a pilot outreach program and parent foundation. The programs she examined are very similar to agriculture education, as they both are specialized, target a specific audience in schools, and have very specific supporters in respective communities. Student responsibility for learning can be seen as linked to the quantity of teacher guidance given during instruction (Gautreau & Binns, 2012). Many teachers cannot provide the hands-on involvement and experience without community support. Within the discipline of science, a community of scientists shares a common set of practices and demeanors when participating in scientific inquiry (Seraphin et al., 2012). The approach of utilizing a community of instructors within a specific discipline
can be another outlet to gain knowledge and resources to allow students a hands-on approach with a set of common practices.

Beyond agriculture, people are creating a need for community support. A program known as the Helping Our Teachers (HOT) program has been created in Georgia to organize parent volunteers and support by participating in school related activities (Chan & Martin, 2001). This program was created to assess support needed in classrooms due to education reform legislation in 2000. The program established a committee to meet the nine areas identified that needed support. Parents and committee work with the administration and it is strictly voluntary which creates no fiscal impact (Chan & Martin, 2001). Volunteers received training in the nine areas and the parents worked weekly to provide support. The program has been shown to contribute to student success and motivates parental support through providing volunteers and educational support (Chan & Martin, 2001).

Despite the apparent need for community support, research suggests this is a continual issue for agricultural teachers. A study conducted by Boone and Boone (2007) examined problems faced by high school agriculture teachers. The research revealed 20 problem areas experienced by beginning and current teachers. Some of the categories included administrative support, discipline, class preparations, time management, community support, budgets/funding, the reputation of the previous teacher and faculty relationships. Community support was one of the main categories with over 20% of the surveyed teachers expressing it as a current problem. Additionally, administrative support was the number one problem amongst almost 50% of the surveyed teachers.
Community support is not just for the advancement of student knowledge, skills and leadership, it also plays a role with instructors. In a study that outlined factors of why agriculture teachers remain in the profession, one of the primary factors identified included an abundance of support from students, parents, administrators and community members (Brown, Clark, & Kelsey, 2014). Brown et al. (2014) noted that community support had a wide range of support from encouragement, physical help with tasks and even financial support. Participants indicated financial support was key as this allowed teachers to “provide better learning environments for their students in the classroom” (p. 50). Teachers in the study said that they had supportive community experiences, which was conducive to job satisfaction (Brown et al., 2014).

To foster student success, partnerships between schools and their community have been advocated as promising vehicles for the success of all those involved in the process. Inherent in the concept of partnering is the premise that all parties benefit from the relationship. More and more schools and districts are recognizing the need to develop effective parent, community, and school partnerships (Cline, Cronin-Jones, Johnson, Hakverdi, & Penwell, 2002).

From the establishment of education to the Morrill Act, community involvement and support has been vital for the advancement of students and their knowledge base. Through legislation and new programs, educators have created a revolutionary education process for students. Agriculture education fosters experiential learning and leadership development, and also encourages community involvement and partnerships. Students across the United States have benefited from the model of agriculture education, and community partnerships have been instrumental in its success.
CHAPTER III

METHODOLOGY

Purpose

The purpose of study was to identify factors that contribute to community support of agriculture education programs. This study sought to identify the perceived support offered by administrators and agricultural advisory/booster groups towards agricultural programs in the North Coast Region. Additionally, the study sought to determine the frequency of participation in community events supporting agricultural education programs.

This study examined high schools and communities of the North Coast Region, consisting of Alameda, Solano, Contra Costa, Marin, Sonoma, Napa, Mendocino, Lake, Humboldt, and Del Norte counties in Northern California. These schools that provide agriculture education are located in separate communities that all specialize in different agriculture sectors. There were 33 schools that were contacted to be part of this study.

The initial surveys administered during a pilot study contained eight questions. One of the questions contained thirteen items on participant support which were measured on a five-point Likert scale. The additional questions were based on demographics and allowed for selection of support criteria and participation.
Objectives

Objective 1: Determine perceived level of community support held by administrators and agriculture advisory/agriculture booster members.

Objective 2: Determine activities associated with community support.

Objective 3: Compare perceived level of support with frequency of activities associated with community support.

Population

The population of this research included agriculture administrators and Agriculture Advisory/Ag Boosters members. The target population, accessed through a purposive sample, included schools and communities of the North Coast Region, consisting of Alameda, Solano, Contra Costa, Marin, Sonoma, Napa, Mendocino, Lake, Humboldt, and Del Norte counties in Northern California. These schools provide agriculture education and are located in separate communities that specialize in different agriculture sectors. Within the 33 high schools surveyed, 33 high school administrators were contacted as potential respondents. Additionally, a digital instrument was sent the agriculture education instructors at each of the high schools to distribute to their agriculture advisory members and agriculture booster members. This was a convenience sample of respondents.

Validity and Reliability

Validity and reliability was established through a pilot study utilizing the survey instrument created by the researcher. The pilot instrument was evaluated by a panel of experts for face and content validity prior to the pilot study, as suggested by
Dillman, Tortora and Bowker (1999). The panel of experts included, Dr. Mollie Aschenbrener, California State University, Chico; Chris VandenHeuvel, Healdsburg High School Administrator; Hugh Mooney, Department of Education Consultant; Natalie Ryan, North High School Agriculture Instructor. Validity describes the meaning of test scores, specifically dealing with the extent to which test scores exclusively measure their intended psychological construct(s) and guide consequential decision-making (Wasserman & Bracken, 2003). Twenty-three participants were involved in the pilot study.

Instrument

The instrument utilized was a researcher developed cross-sectional survey to gather data contained questions that surveyed background information such as gender, affiliation to the agriculture education program and number of years in this role. Additionally, the instrument allowed respondents to gauge their levels of participation in agriculture programs at the local level through closed ended questions.
CHAPTER IV

FINDINGS AND RESULTS

The purpose of study was to identify factors that contribute to community support of agriculture education programs. This study sought to identify the perceived support offered by administrators and agricultural advisory/booster groups towards agricultural programs in the North Coast Region. Additionally, the study sought to determine the frequency of participation in community events supporting agricultural education programs.

Presentation of Findings

Survey results indicated 83.33% \((n=10)\) of the respondents were agriculture booster or agriculture advisory members. The other respondents include administrators which were 16.67% \((n=6)\) (see Figure 2). All respondents were asked the length they served in their current position. The majority, 50.00% \((n=6)\) of respondents indicated 20+ year in their current position. This shows that respondents were experienced in their current position (see Figure 3). Nearly, 33.34% \((n = 4)\) of respondents have served 6-15 years, in their current position.

When surveyed on a scale of 5 (strongly agree) to 1 (strongly disagree), respondents gauged their level of contribution through their current level support. Nearly 70% of respondents agreed to strongly agree to all questions that aimed to gauge their
Figure 2. Affiliation to the agriculture education program. Shows the percentage of each type of affiliation that participated in completion of the survey.

Figure 3. Time of affiliation in a professional capacity. This shows the length of time each respondent has been in their professional capacity listed in figure 1.
level of support (See Table 1). This shows dedicated, support through activities such as FFA leadership, Supervised Agriculture Experience (SAE) projects and curriculum design and review.

When asked about current level of contribution, the criteria “I support the agriculture department at my school” and “I have attended FFA events/activities”, both received the highest median, all being 4.5 or above, with the frequency of the answer “agree” or higher, is above 91% for the questions. The statement receiving the highest frequency of “strongly disagree” was 9.01% and was for the respondents and if they have provided suggestions to the agriculture program.

Additionally, respondents indicated their involvement regarding their local agriculture education program. Participants were asked to select all activities that applied to their current involvement (see Table 2). This question allowed for an open ended response, of which five respondents selected. Their answers included: Work with multiple agencies and organizations in the community to develop support for our programs, member of Ag Advisory Committee, liaison for our local Ag Boosters, help with swine projects and boosters committee, and teacher and parent. The most frequent level of involvement for respondents was the participation and attendance in fundraisers with a frequency of 100% (n=12). The lowest frequency was for the “other” option, receiving only 8.33%. However, the lowest frequency for a given option was 16.67% for SAE time and expertise as well as chaperoning or driving to a leadership conference. Seven of the local support criteria factors receiving a response frequency of 50% or higher.
### Table 1.

**Level of Contribution to the Local Agriculture Education Program**

Please rank the below areas 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree as you are:
(select the appropriate choice for each question)

<table>
<thead>
<tr>
<th></th>
<th>1= Strongly Disagree</th>
<th>2= Disagree</th>
<th>3= Neutral</th>
<th>4= Agree</th>
<th>5= Strongly Agree</th>
<th>Not Applicable</th>
<th>N/A</th>
<th>Total</th>
<th>Weighted Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>I support the agriculture department at my school</td>
<td>8.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.33%</td>
<td>83.33%</td>
<td>0.00%</td>
<td>12</td>
<td>4.58</td>
<td></td>
</tr>
<tr>
<td>I have contributed financially to my school’s program</td>
<td>8.33%</td>
<td>0.00%</td>
<td>8.33%</td>
<td>25.00%</td>
<td>58.33%</td>
<td>0.00%</td>
<td>12</td>
<td>4.25</td>
<td></td>
</tr>
<tr>
<td>I have invested time in my local agriculture program</td>
<td>8.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>25.00%</td>
<td>66.67%</td>
<td>0.00%</td>
<td>12</td>
<td>4.42</td>
<td></td>
</tr>
<tr>
<td>I believe the school is supportive of the agriculture program</td>
<td>0.00%</td>
<td>0.00%</td>
<td>8.33%</td>
<td>41.67%</td>
<td>50.00%</td>
<td>0.00%</td>
<td>12</td>
<td>4.42</td>
<td></td>
</tr>
<tr>
<td>I believe the community is supportive of my local program</td>
<td>8.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>25.00%</td>
<td>66.67%</td>
<td>0.00%</td>
<td>12</td>
<td>4.42</td>
<td></td>
</tr>
<tr>
<td>I have attended FFA events/activities</td>
<td>8.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>16.67%</td>
<td>75.00%</td>
<td>0.00%</td>
<td>12</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>I have assisted with local SAE projects</td>
<td>0.00%</td>
<td>0.00%</td>
<td>9.09%</td>
<td>36.36%</td>
<td>36.36%</td>
<td>18.18%</td>
<td>11</td>
<td>4.33</td>
<td></td>
</tr>
<tr>
<td>I have assisted with FFA Leadership events</td>
<td>0.00%</td>
<td>0.00%</td>
<td>18.18%</td>
<td>36.36%</td>
<td>36.36%</td>
<td>9.09%</td>
<td>11</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>I have helped with the design/review of class curriculum</td>
<td>0.00%</td>
<td>0.00%</td>
<td>25.00%</td>
<td>41.67%</td>
<td>8.33%</td>
<td>25.00%</td>
<td>12</td>
<td>3.78</td>
<td></td>
</tr>
<tr>
<td>I have reviewed/assisted with program budgets</td>
<td>0.00%</td>
<td>0.00%</td>
<td>9.09%</td>
<td>36.36%</td>
<td>45.45%</td>
<td>9.09%</td>
<td>11</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>I have provided suggestions to the agriculture program</td>
<td>9.09%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>45.45%</td>
<td>36.36%</td>
<td>9.09%</td>
<td>11</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>I believe that my contribution to the Ag program is significant</td>
<td>8.33%</td>
<td>0.00%</td>
<td>8.33%</td>
<td>41.67%</td>
<td>41.67%</td>
<td>0.00%</td>
<td>12</td>
<td>4.08</td>
<td></td>
</tr>
<tr>
<td>I plan to support my Ag program in the future</td>
<td>8.33%</td>
<td>0.00%</td>
<td>8.33%</td>
<td>16.67%</td>
<td>66.67%</td>
<td>0.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.

Local Support Criteria

How do you show support of the local FFA chapter and Ag program: (check all that apply)

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Frequency of Respondent Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend/participate in fundraisers</td>
<td>100.00%</td>
<td>12</td>
</tr>
<tr>
<td>Participate in committees and meetings</td>
<td>75.00%</td>
<td>9</td>
</tr>
<tr>
<td>Volunteer (classroom/guest speaker)</td>
<td>66.67%</td>
<td>8</td>
</tr>
<tr>
<td>Community service participation</td>
<td>58.33%</td>
<td>7</td>
</tr>
<tr>
<td>Volunteer to participate in above chapter level activities (e.g., Speaking contests, project competition, etc.)</td>
<td>58.33%</td>
<td>7</td>
</tr>
<tr>
<td>Purchase livestock projects</td>
<td>50.00%</td>
<td>6</td>
</tr>
<tr>
<td>Contribute supplies to classroom/SAE/FFA</td>
<td>50.00%</td>
<td>6</td>
</tr>
<tr>
<td>FFA involvement/achievement above the chapter level</td>
<td>41.67%</td>
<td>5</td>
</tr>
<tr>
<td>SAE time/expertise (Supervised Agriculture Experience Projects)</td>
<td>16.67%</td>
<td>2</td>
</tr>
<tr>
<td>Chaperone/drive to leadership conferences</td>
<td>16.67%</td>
<td>2</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>8.33%</td>
<td>1</td>
</tr>
</tbody>
</table>
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

☑️ **Objective 1: Determine perceived level of community support held by agriculture teachers, administrators and agriculture advisory/agriculture booster members.**

The results of data collected indicate a number of things when trying to identify trends in community support. The majority of respondents believe they support their local agriculture education program through contributions of supplies to classroom/SAE/FFA, along with spending time and providing expertise with SAE projects, Community Service participation, FFA involvement above the chapter level, chaperone and drive to leadership conferences, participation in committees and participation above the chapter level. The most selected response for showing support was respondent’s selection of attending and participating in fundraisers with 100% relative frequency of the 12 surveys returned. Briers et al. (2012) collected data where the majority of their test population agreed or strongly agreed that innovative agriculture education programs involve not only students but also, teachers, administrators, professionals in the community, parents, community partnerships, superintendents, agriculture businesses, FFA alumni, board of education in addition to industry representatives. This study appears to support the
findings of Briers et al. (2012). All variable and factors identified in Table 1, indicate a strongly agree response with a minimum of 45% frequency. This finding appears to support the findings of Masser et al. (2014) who stated, “Agricultural education, advisory councils are the entities that bridge this gap between the community and the local school” (p. 116).

Objective 2: Determine activities that are associated with community support.

Based on the reported frequencies and data, it can be assumed that there are many factors that contribute to community support and how community members choose to show that support. Whether contributing supplies to the classroom, FFA or SAE projects, which had frequency of 61.8%, to attending and participating in fundraisers which had a relatively high frequency (89.1%), community members are involved in the agriculture education programs in the North Coast Region. This follows research found by Masser et al. (2014) who suggested that community members and advisory contribute heavily, “advisory councils, also known as advisory committees or boards, are a selected group of business, community, and school stakeholders who provide input on the planning, development, implementation, and operations” for programs (p. 116).

Objective 3: Compare perceived level of support with frequency of activities associated with community support.

Based on Table 1 which identified community member’s level of contribution to the local agriculture education program, it can be assumed that community members, boosters, agriculture advisory and administration feel their greatest contributions are through investment of time, attendance at FFA activities in addition to assisting with SAE projects. This agrees with prior research which documented that a substantial research
has been conducted pertaining to “SAE programs in an effort to aid program partners in administering effective SAEs” (Dyer & Osborne, p. 24). These partners can include community partners and industry professionals. Community members believe their contributions are significant to their local agriculture program with over 40% frequency of responses being strongly agree.

The most intriguing piece of data came from the statement, “I support the agriculture department at my school.” With a frequency of 91.66% of responses being agree or strongly agree, the current support of agriculture programs in the North Coast Region appears to be strong. However, the frequency of responses to the statement being strongly disagree was 8.33%. Although perceived support appears high, it would be expected that all respondents with the survey instrument would agree that they support their agriculture department, but based on data collected this is not correct. This could be for various reasons; however, there is no true way of determining which respondents feel they do not support the program at their school due to the anonymity of the survey instrument. Agricultural educators in this study should be aware that not all administrators appear to support agriculture programs in the North Coast region. Additionally research should focus on identifying why administrators are not supportive in some schools.

Further research should be expanded to include the perceived levels of community support by parents. Although parents associated with agriculture programs change every year due to student enrollment in high school, they would be a valuable group of potential respondents. Parents are the most connected to the student population in a high school agriculture program and they typically have high rates of involvement. This involvement
could also be connected to involvement in the agriculture and business community of a town. Additionally, comparing specific agriculture teacher instrument responses with the responses of their community could also provide insight into determining levels of community support and their factors based on role.

Implications

The results from this study were analyzed with a Likert scale and suggest that while the factors that influence community support may be broad, the importance of community support is vital. The nature of community support is less dependent on contributions such as program structure and guidance. Based on data, community support is driven by intrinsic motivation to be involved through fundraisers, community service and even chaperoning conferences. It is the intrinsic belief that a community member’s contribution is significant, that continues their support.

While community members seem to show support regardless of program success, programs should continue to provide outlets for community members to become involved while recruiting new participation. By incorporating the activities listed in the instrument, such as fundraisers, community support, participation in committees, SAE expertise, and participation above the chapter level, etc. a program could foster continued community support in a positive direction. Allowing more community members to participate and encouraging new participation creates highly motivated and supportive individuals. These individuals are more likely to support a program for many years regardless of program status.
The aforementioned results suggest that agriculture programs should foster relationships with community members, administrators, agriculture advisory and booster members. These individuals provide support while potentially offering an expertise to help the program expand in a content area, SAE area and even curriculum area. As agriculture programs continue to maintain or increase enrollment, community support is a vital component that allows for further success and support.
REFERENCES
REFERENCES


https://www.ffa.org/about/agricultural-education

https://www.ffa.org/about/what-is-ffa/statistics

Patterson & B. Horwood (Eds.), *Experience and the curriculum* (pp. 51-67).
Dubuque, IA: Kendall Hunt Publishing.

Rayfield, J., Murphy, T., Briers, G., & Lewis, L. (2012). Identifying Innovative
Agricultural Education Programs. *Journal of Career and Technical
Education*, 27(2), 38-50.

agricultural educators. *Journal of Agricultural Education, 47*(1), 17-29.

Toward a new theory. *Children, Youth, and Environments, 14*(1), 140–150.

means to increase the effectiveness of inquiry-based science education.

http://www.britannica.com/EBchecked/topic/549939/Smith-Hughes-Act

Smith-Hughes Act, S. 703, 64th Cong. (1917).

Retrieved from http://www.loc.gov/rr/program/bib/ourdocs/Morrill.html


APPENDIX A
FACTORS CONTRIBUTING TO COMMUNITY SUPPORT FOR AGRICULTURE EDUCATION PROGRAMS

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Agriculture Education

by
© Wesley Christine Hunt

All participants involved in the research regarding the collection of data pertaining to Community Support in Agriculture Education are informed of consent through the instrument used for data collection. See the below informed consent statement attached to the instrument.

INFORMED CONSENT:

Thank you for completing our survey!

By submitting this survey you are acknowledging consent that the results will be used in analyzing community support as part of research for a Master's thesis.
Submission Checklist
APPLICATION FOR HUMAN SUBJECTS
IN RESEARCH CLEARANCE

The attached form is to be completed by those using human subjects in research. Please refer to the attached “Requirements for Research Using Human Subjects” to help define the category of exemption that you are applying for. If, after reading the attached information you have questions, contact Marsha Osborne 898-5413 or HS&S AC@csuchico.edu. Return your completed application to Marsha Osborne, Student Services Center (SSC), Room 460.
Each of the items below must be included on your form. Please mark each item on the checklist below when it is completed.

1. Application Category
   - a. Exempt
   - b. Expedited
   - c. Joint Review
   - d. Full Board Review
   - e. Psychology

2. ☒ Copy of Survey or Research Instrument attached
3. ☒ Copy of Informed Consent form attached
4. ☐ Obtain (Page 5) signature of the Department Chair, or thesis committee chair for thesis project, or faculty supervisor for group or individual class project(s) or other campus unit supervisor for research originating in non-academic units.

NOTE: Incomplete applications will not be processed. Incomplete forms will be returned for the required information before any further processing, which may result in a delay of clearance.

You will be notified when your application is approved, at which time you may proceed with data collection. A Post Data Collection Questionnaire will be mailed to you along with your letter of approval. After completing data collection, you will need to fill out and return the Post Data Collection Questionnaire in order to be fully cleared. Failure to provide this may result in academic delay.

Wesley Hunt
Signature

2/2/15
Date

Wesley Hunt
Name (print)

This application is also available on-line: http://www.csuchico.edu/resp/Forms pol travel/ form/hsr hs rec application doc

1
APPLICATION FOR HUMAN SUBJECTS IN RESEARCH CLEARANCE
Complete ALL items below. If an item does not apply, indicate N/A. Incomplete and unsigned applications cannot be processed.

Primary Investigator: Wesley C. Hunt CSU Chico Portal ID#: 003845115

Select a, b, c or d: ☐ a. Undergraduate ☑ b. Graduate ☐ c. Faculty ☐ d. Staff

If a. is selected: Faculty Advisor ____________________________

If b. is selected: Graduate Coordinator: Mollie Aschenbrener Thesis Chair: Mollie Aschenbrener

If c. is selected: Application is required for a grant or proposal? Yes ☐ No ☑

If Yes—Name of Funding Source: ____________________________

College/Department of Primary Investigator:
College: Agriculture / Dept: Agriculture Education

Home Address of Primary Investigator: 506 W. Mill St.

City: Ukiah Street Address or P.O. Box: ____________________________

State: CA Zip: 95482

Home Phone: 707-272-8003 Work Phone: 707-321-3420 Email: misswhunt@gmail.com

Secondary Investigator: Mollie Aschenbrener

(Faculty Advisor or Theses Chair is required to be Secondary Investigator if a student is primary investigator)

College: Agriculture / Dept: ____________________________

Application Category: Exempt

Project Title: Factors Contributing to Community Support for Agriculture Education Programs

Briefly describe the project purpose and methodology: The purpose of the project is to collect evidence from teachers, advisory and administrators to identify any potential patterns of community support as well as establish criteria to determine how community support is measured and interpreted.

Project’s: Beginning Date: 02/2/15 Ending Date: 5/5/15

Begin date can’t precede approval mm/dd/yy mm/dd/yy

Select one: ☑ New Project ☐ Modification ☐ Substudy

If Modification or Substudy, please list project title and name of primary investigator from previous study.
Complete all sections (If a section is not applicable to your project, indicate N/A)

Subject population: teachers, administrators, and agriculture advisory/booster members.

Subject source: NA

Number of subjects: 50

How subjects will be contacted: directly

Note: In most research, subjects MUST give written (usual), oral (sometimes), or written AND oral informed consent. A copy of your Informed Consent form must be attached to this application. (See page 4 of the attached, Requirements for Research Using Human Subjects, for detailed information about Informed Consent requirements.) Specify types of instruments to be used (e.g., tests, questionnaires, interview guides, etc.)

survey

A copy of all instruments to be used must be attached. If they have not been completely developed, please attach a draft.

How administered: ☐ Phone  ☐ Mail  ☐ Face-to-face  ☑ Email  ☐ Internet

Length of subject participation: 10 minutes

Frequency of subject participation: 1

Data will be recorded using (check all that apply):

☐ Written Notes  ☐ Photography
☐ Audio tape  ☐ Film
☐ Video tape  ☐ Computer
☐ Other (Please describe instrument)

Subjects’ confidentiality must be preserved. This requires that their identity and the fact and the nature of their responses be kept in confidence. Please indicate all measures you will take to insure the protection of subjects’ confidentiality including where all data will be stored and when it will be destroyed:

☐ No names of subjects will be collected. All data collected relative to the instrument will be collected through SurveyMonkey, therefore data will be stored on an internet site. Following all collection and analysis of results, data will be destroyed.

☐ Other (Please describe instrument)
Please check (X) each category of data, which will be collected, and place a star (*) after each category of data which will be reported in your study.

**Subjects**
- [ ] Names of People
- [ ] Addresses
- [x] Phone Numbers
- [x] Ages *
- [x] Sex Categories *
- [ ] Ethnicity
- [ ] Marital Status
- [ ] Types of Employers
- [ ] Incomes
- [x] Job Titles *
- [ ] Names of Employers

**Other**
- [ ] Codes Linked To Subjects’ Names By Separate Code Key
- [ ] Codes Not Linked To Subjects’ Names
- [ ] Other Unique Information About Individuals
  Specify: ________________________________________________

Will existing data be used?  [ ] yes  [x] no
(Specify: ________________________________________________)

Will there be interventions or manipulations of subjects or their environments?  (Specify: n/a)

Will the research involve?
- [ ] Psychological Stress?  [x] yes  [ ] no
- [ ] Physical Hazards?  [x] yes  [ ] no
If yes, please specify: __________________________________

Will there be debriefing of subjects?  [ ] yes  [x] no
If yes, please describe: __________________________________

Will data reporting be [ ] aggregated?  [x] anecdotal?
Data will be used for (check all that apply):

- [ ] Publication
- [ ] Evaluation  [x] Degree Requirement
- [ ] Needs Assessment  [ ] Class report (written/oral)

Other (Please describe): __________________________________

________________________
RECOMMENDATION

This activity has been reviewed in accordance with Federal regulations, including its relevant subparts. In compliance with these guidelines,

☐ I concur ☐ I do not concur

that this project is **exempt** from review of the Institutional Review Board or the Unit Regulatory Body.

Department Chair or other Supervisor (Faculty & Staff) ______________________________ Date ________________

Faculty Supervisor or Thesis Chair (Students) ______________________________ Date ________________

☐ I concur ☐ I do not concur

that this project is **exempt** from review of the Institutional Review Board or the Unit Regulatory Body.

Chair, Institutional Review Board ______________________________ Date ________________

Comments:

☐ Human subjects are involved, but this activity qualifies for an **Expedited** Review.

Chair, Institutional Review Board ______________________________ Date ________________

Comments:

Full Board Review

☐ I concur ☐ I do not concur

that this project has gone through the Institutional Review Board or the Unit Regulatory Body and the required modifications have been completed.

Chair, Institutional Review Board ______________________________ Date ________________

Comments:
Community Support for Agriculture Education Programs

Please select the most appropriate responses.

*1. Gender:
- Female
- Male

*2. How long have you been affiliated with the agriculture education program at your school?
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 20+ years

*3. Affiliation to the Ag Ed Program:
- Ag Booster/Ag Advisory Member
- Agricultural Teacher
- Administrator

*4. Length of time in this professional capacity? (ie. Total years as an ag teacher, administrator, booster/advisory members)
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 20+ years

*5. Were you a part of an agriculture education program while in high school?
- Yes
- No

*6. Were you an active FFA member while in high school?
- Yes
- No
<table>
<thead>
<tr>
<th>1= Strongly Disagree</th>
<th>2= Disagree</th>
<th>3= Neutral</th>
<th>4= Agree</th>
<th>5= Strongly Agree</th>
<th>Not Applicable N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I support the agriculture department at my school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have contributed financially to my school’s program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have invested time in my local agriculture program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe the school is supportive of the agriculture program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe the community is supportive of my local program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have attended FFA events/activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have assisted with local SAE projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have assisted with FFA Leadership events</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have helped with the design/review of class curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have reviewed/assisted with program budgets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have provided suggestions to the agriculture program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that my contribution to the Ag program is significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I plan to support my Ag program in the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Community Support for Agriculture Education Programs

*8. How do you show support of the local FFA chapter and Ag program: (check all that apply)

☐ Volunteer (classroom/guest speaker)
☐ Contribute supplies to classroom/SAE/FFA
☐ SAE time/expertise (Supervised Agriculture Experience Projects)
☐ Community service participation
☐ FFA involvement/achievement above the chapter level
☐ Attend/participate in fundraisers
☐ Purchase livestock projects
☐ Chaperone/drive to leadership conferences
☐ Participate in committees and meetings
☐ Volunteer to participate in above chapter level activities (ie. Speaking contests, project competition, etc.)
☐ Other (please specify)
HUMAN SUBJECTS IN REVIEW COMMITTEE
Post Data Collection Questionnaire

Under Federal law relating to the protection of Human Subjects, this report is to be completed by each Principal Investigator at the end of data collection.

Please return to: Marsha Osborne, HSRC Assistant
Office of Graduate Studies
Student Services Center (SSC), Room 460
CSU, Chico
Chico, CA 95929-0875

Or Fax to: Marsha Osborne, 530-898-3342

Name: Wesley Hunt Chico State Portal ID: 003845115

Phone(s) 707-272-8003 Email: misshunt@gmail.com

Faculty Advisor name (if student): Mollie Aschenbrener Phone

College/Department: College of Agriculture

Title of Project: FACTORS CONTRIBUTING TO COMMUNITY SUPPORT FOR AGRICULTURE EDUCATION PROGRAMS

Date application was approved (mo/yr.): __/__/2015 Date collection complete (mo/yr.): 3/2015

How many subjects were recruited? 75 How many subjects actually completed the project? 12

*HARM—Did subjects have severe reactions or extreme emotional response? No

If yes, please attach a detailed explanation:

Your signature: Wesley Hunt Date: 4/15/2015

*Final clearance will not be granted without a complete answer to this question.

Approved By: John Mahoney, Chair

******************************************************************************

VERY IMPORTANT: If you will or have used this research in your project or thesis you are required to provide a copy of this form (with John Mahoney’s signature in place) to your graduate committee.

Do you want a photo copy of this form emailed to you? No

If yes, provide email address:

******************************************************************************