AN ASSESSMENT OF THE OKLAHOMA COOPERATIVE EXTENSION SERVICE INTERNSHIP PROGRAM

By

LESLEY RENEE LEHENBAUER-MEIER

Bachelor of Science in Agricultural Education

University of Missouri

Columbia, Missouri

2004

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May, 2008

AN ASSESSMENT OF THE OKLAHOMA

COOPERATIVE EXTENSION SERVICE

INTERNSHIP PROGRAM

Thesis Approved:

Dr. William Weeks

Thesis Adviser

Dr. Charles Cox

Dr. J. Shane Robinson

Dr. A. Gordon Emslie

Dean of the Graduate College

ACKNOWLEDGEMENTS

There are many people that have encouraged me along the way and without their support; the completion of a thesis would not have occurred. First, I must thank my wonderful husband, Greg, who has been understanding and supportive, even if he did not understand my frustrations. I am grateful for his love and encouragement over the past two years, and for bringing me to Oklahoma.

My family, especially mom and dad who instilled in me I can do anything I set my mind to. Thank you for everything you did for me over the years. My wonderful brothers and their spouses: Mark and Amy, Andy and Jessica, thanks for being supportive, especially during October, 2007.

Thank you to my friends; whether in Missouri or Oklahoma, your words of encouragement were a blessing. You never let me give up and you listened, even though you had no idea what I was talking about. I am especially grateful to Kellie, I'm glad we both ended up in the State 4-H office. Thank you for listening to my stories, complaints, for great feedback and edits, but most of all, for being my friend.

Thank you to my committee for helping through this process and for the great feedback. Thank you Dr. Weeks for the time you devoted to my study and for listening to me worry about the little things, Dr. Cox for giving me the opportunity to do this study, and Dr. Robinson for joining my committee halfway through the process.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

Similar to the decline in higher education enrollment in food and agricultural sciences programs, there is a decline in the pool of potential Extension educators (Seevers, Treat, Cummings, and Wright, 1996). It is estimated over 50 professionals will need to be hired in Oklahoma Cooperative Extension Service over the next five years due to retirement and resignations. This will consist of educators, support staff, and faculty (J. Trapp, personal communication, March 6, 2008). In 2007, 19 educators left Oklahoma Cooperative Extension to pursue other employment, including two educators who retired (C. Cox, personal communication, March 5, 2008). The turnover rate for Extension educators is 5-10% of approximately 200 educators in Oklahoma (J. Trapp, personal communication, March 6, 2008).

Internships have become an important part of the college experience for students. These internships allow students to experience careers before actually entering the workforce (Patterson, 1997). Internships have perceived benefits for both students (interns) and organizations (mentors). Interns are able to bridge the gap between classroom learning and the real world (Gault, Redington, & Schlager, 2000) while companies view interns as potential full-time employees (Stone & McLaren, 1999). A 2005 study by the National Association of Colleges and Employers reported, on average, more than three out of five college hires had an internship experience (Jones, 2006).

A proactive stance is being taken by Oklahoma Cooperative Extension Service for the potential shortage of Extension Educators. One aspect of this strategy is the development of an internship program as a potential recruiting tool (C. Cox, personal communication, March 29, 2007). The internship experience allows students and organizations to determine if they are a good fit for each other (Neapolitan, 1992). Determining that a career is wrong fit is as beneficial as finding that a job is a right fit, saving the intern and company both money and time.

Zanville and Markwood (1982) list three stages of development internship programs go through: birth, growth and development, and stabilization. The Oklahoma Cooperative Extension program is in its inaugural or birth year. The birth stage is described as "newly-developed, starting from scratch to build a staff, locate students and sponsors, and develop procedures to keep the new program flowing" (p. 125). Usually in this stage, the program begins small and contacts established programs to gain insight into how these other programs are run. Once the program has established operating procedures, growth is typically fast (Zanville & Markwood).

In 2007, the Oklahoma Cooperative Extension Service directed funds to develop a collegiate internship program. To develop the program, established Cooperative Extension internship programs at the University of Florida and Purdue University were reviewed as examples (C. Cox, personal communication, March 29, 2007). The University of Florida's internship program is for college juniors, seniors, and graduates, is six weeks long, and is a paid program with the goal of exposing students to the work of Extension educators in a county office (University of Florida, 2008). Purdue University's

program is similar except their internship period is longer at 8 to 10 weeks (Purdue University, 2008).

In the summer of 2007, the Oklahoma Cooperative Extension internship program hosted 12 interns who were college juniors, seniors, or graduate students. The internships were 10 to 12 weeks long and interns were paid. Fourteen counties each hosted an intern, with two interns being shared by two counties.

Statement of Problem

While there is literature on the success of internships in various organizations, the literature is lacking in terms of internship success or failure related to Cooperative Extension. The Oklahoma Cooperative Extension Service is making an investment in students who are potential employees. It is important to determine the return on this investment and whether Cooperative Extension is receiving a return on its investment. This evaluation is one way to assess the value of that investment.

Purpose of Study

The purpose of this study was to establish baseline data for the Oklahoma Cooperative Extension Service's internship program. The data will be used to evaluate the internship experience and program.

Research Objectives

The following objectives directed this study:

1. Describe the demographic characteristics of the interns and mentors.
2. Describe the interns' and mentors' attitudes toward the Oklahoma Cooperative Extension Service.
3. Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy.
4. Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities throughout the internship.

Limitations of Study

The findings and conclusions of this study are only applicable to the 12 interns and 18 mentors who participated in this study. The information cannot be generalized to future interns or other internship programs or populations.

Basic Assumptions of Study

It is believed the interns answered the surveys accurately to the best of their knowledge. All interns and mentors answered true to their feelings, not what they felt an answer should be. The weekly journals were accurate and an honest representation of the interns' experiences and provided sufficient data to be used in the analysis.

Significance of Study

The study will contribute to the general literature concerning internships. There is minimal research concerning internships specific to the Cooperative Extension Service, and the study will add to what is currently available. The data collected will be useful in the future planning and development of the Oklahoma Cooperative Extension Service internship program. The study will establish baseline data that can be used for a longitudinal study to determine whether interns enter the Extension education profession.

Definition of Terms

For clarity in this study, the following definitions will be used:

Cooperative Extension Service – "A public funded, non-formal, educational system that links the education and research resources of the U.S. Department of Agriculture, land-grant universities, and county administrative units. The basic mission of this system is to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs" (Seevers, Graham, Gamon, & Conklin, 1997, p. 244).

Extension Educator – Person who develops, coordinates, and presents educational programs related to their Extension program assignment (agriculture, rural development, 4-H youth development, family and consumer science); Seevers et. al (1997, p. 244) stated an educator's "responsibilities include transferring the findings of research and new technology to the solution of problems in the community."

Internship – "Three-way partnership between the educational institution, the student intern, and the organization where the interns take on the challenges of a program of

systematic experiential learning. It is a structured and supervised professional experience within an approved agency for student learning" (Inkster & Ross, 1995, p. 11).

Self-Efficacy – "Beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3)

Staffing Assignments – Educators may be assigned to more than one program area; they are assigned to a specified program for a certain amount of time. Extension's main program areas include 4-H Youth Development, Family and Consumer Sciences, Rural and Community Development, and Agriculture.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this chapter is to familiarize the reader with information related to the topic of this research study. The theoretical framework of the study will be discussed as well as the history of the Cooperative Extension Service. General internship information, career skills development, internships as an employment vehicle, and information relating to the objectives of this study will also be discussed. The objectives of the study are:

1. Describe the demographic characteristics of the interns and mentors.
2. Describe the interns' and mentors' attitudes toward the Cooperative Extension Service.
3. Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy.
4. Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities throughout the internship.

Theoretical Framework

The theoretical framework of this study is based on David Kolb's model of experiential learning. Kolb (1984) offers a working definition of experiential learning as "Learning is the process whereby knowledge is created through the transformation of experience" (p. 38). Another definition is when the learner is in direct contact with the realities being studied (Zanville & Markwood, 1982). Much of the internship literature cites experiential learning as the framework or basis of the internship experience. (Beard, 2007; Inkster & Ross, 1995, 1998; Parilla & Hesser, 1998; Stedman, Rutherford, & Roberts, 2006; Stone & McLaren, 1999; Zanville & Markwood, 1982).

Kolb posits that experiential learning is built upon six ideas shared by numerous scholars in the human learning and development field including Dewey, Lewin, and Piaget (Kolb, 1984; Kolb & Kolb, 2005). These six ideas are: (1) Learning is best conceived as a process, not in terms of outcomes, where ideas are formed and reformed. (2) Learning should be relearning where students' ideas are brought out, examined and mixed with new refined ideas. (3) Conflicts help to drive the learning process. (4) Learning involves the whole person, i.e. thinking, feeling, perceiving, and behaving. (5) Learning is a process of combining new experiences with old experiences and vice versa. (6) Creating new knowledge is a process of learning (Kolb; Kolb & Kolb).

Smith (2001) discusses Kolb's experiential learning model as having four points which are concrete experience (CE), observation and reflection (RO), forming abstract concepts (AC), and testing in new situations (AE). A person can begin at any point of the model during the learning process. Figure 1 is a diagram of Kolb's experiential learning process. Kolb (1984) describes the four points as:

> They [learners] must be able to involve themselves fully, openly, and without bias in new experiences (CE). They must be able to reflect on and observe their experiences from many perspectives (RO). They must be able to create concepts that integrate their observations into logically sound theories (AC) and they must be able to use these theories to make decisions and solve problems (AE) (p. 30).

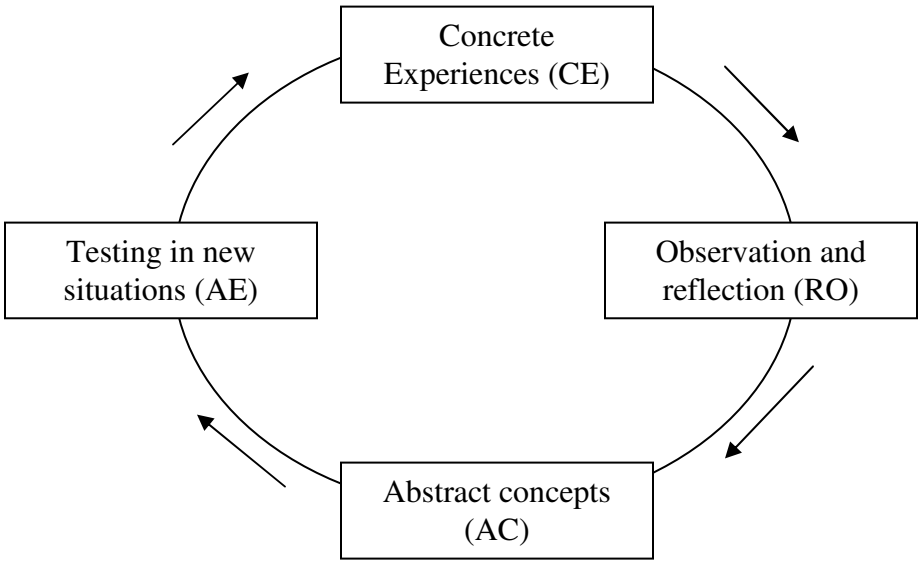


Figure 1. Kolb's model of experiential learning.

Motivation, retention of material, and personal accomplishment are potential outcomes of experiential learning (Parilla & Hesser, 1998). Experiences allow classroom learning to become a reality and deeper levels of understanding to occur while knowledge and insight about an industry are cultivated (Parilla & Hesser). The opportunity for experiential learning is an important component of internships because the best internships adhere to a pragmatic approach (Jones, 2006).

Literature Review

History of the Cooperative Extension Service and Research

The Cooperative Extension Service was established by the Smith-Lever Act in 1914 as a partnership between the U.S. Department of Agriculture and land grant universities. The purpose of the Smith-Lever Act was to "diffuse among the people of the United States useful and practical information on subjects relating to Agriculture and Home Economics, and to encourage the applications of the same" (Seevers et al., 1997, p. 253). Today the mission of Cooperative Extension is to "enable people to improve their lives and communities through learning partnerships that put knowledge to work" (Seevers, et al., p. 1). This mission is fulfilled through the various program areas of Cooperative Extension Service. These program areas include agriculture, consumer and family science, rural and community development, and 4-H youth development.

The duties of an Oklahoma Extension educator include assessing county needs, preparing and delivering programs to the public, providing educational leadership, evaluating program effectiveness, and recruiting, training, and developing leaders. Other duties consist of developing and maintaining public relations, performing administrative duties, coordinating 4-H activities, and responding to client requests for information and assistance (DASNR, 2006). Educators are expected to be able to communicate effectively both verbally and written, provide leadership, build and maintain relationships, and manage and organize time and resources (DASNR).

Competencies required for an Extension educator change over time (Cooper & Graham, 2001). The competencies Cooper and Graham identified as needed by educators were broken into seven areas which included 1) program planning, implementation, and

evaluation, 2) public relations, 3) personal and professional development, 4) faculty and staff relations, 5) personal skills, 6) management responsibility, and 7) work habits.

Gruntmeir (1999) studied the relationship between self-efficacy, problem solving, and attitude toward the Cooperative Extension Service with current Extension educators. She found female educators with an advanced degree tended to have a higher self-efficacy score than their male counterparts. Problem solving and self-efficacy were found to be positively correlated. Problem solving ability is helpful in predicting self-efficacy scores and vice versa. The attitude measurement did not correlate with problem solving or self-efficacy. However, it was helpful in identifying the characteristics and mission of Cooperative Extension as perceived by the educators. Overall, the educators had higher than normal self-efficacy and problem solving scores. The attitude and self-efficacy instruments used in Gruntmeir's study were used in this study.

Literature about Cooperative Extension Service Internships

There is little literature regarding a state sponsored internship program through the Cooperative Extension Service. An internet search found the following states having internships sponsored by Cooperative Extension: Minnesota, Georgia, New York, South Carolina, Arkansas, Tennessee, Kentucky, Florida, and Indiana; however, this list may not be comprehensive.

Moseley and Balschweid (2003) conducted a qualitative study at Purdue University with Cooperative Extension interns. Their study focused on identifying the fundamental skills and knowledge gained from the internship experience and the interns' perceptions on how to best obtain these skills and knowledge. The five skills interns felt

were developed through the internship experience were working and interacting with people, program preparation and planning, communication, teamwork, and an understanding of rules and policies.

Moseley and Balschweid (2003) found the interns thought the best ways to obtain the skill of working and interacting with people was through role-playing, talking with past interns, and establishing procedures for working with volunteers. The skill of program preparation and planning was thought to be best taught by utilizing past interns' experiences, keeping an internship notebook to track progress, and maintaining a checklist of what needs to be done. The interns recommended developing the skill of communication by having an active role in teaching a program, holding a communication workshop for interns, and regular office meetings. Teamwork skill suggestions included an activity to build teamwork among the office and the use of real-life examples. The final skill of rules and policies was thought to be best taught by the use of case studies.

Seevers et al. (1996) discussed the "Building Bridges" project whose purpose was to develop an intern leadership experience emphasizing minority group involvement in New Mexico. Objectives for the program interns were to: analyze leadership practices used in Cooperative Extension or community programs, analyze interactions among personnel, develop communication skills, view the leadership role of personnel, develop a leadership development program, and evaluate the "Building Bridges" project. The interns attended meetings, prepared media releases, worked with clientele, volunteers, and public officials, and presented programs during the internship. Seevers et al.'s survey, based on the Youth Leadership Life Skills Development Scale, was used for two different sets of interns over the course of two years. The first year of interns had

increases in 26 of 30 items on the leadership life skills scale while the second year of interns had increases for 16 of the 30 items from pre to post test. Seevers et al. found the internship experience provided professional growth for mentors, career awareness and professional contacts for students, personal and professional development opportunities, and an interest in the continuation of the program. The study showed the internship did assist in the development of the leadership life skills.

Cornell Cooperative Extension developed an internship position within a county because they "believed the internship would be an opportunity to develop a new professional with Extension experience and prepare the individual for a permanent position with Extension" (Grogan & Eshelman, 1998, para. 13). An internship proposal was developed to fill a temporary staff vacancy within the county. The intern who was selected completed the internship and was later hired as an Extension Educator.

The University of Florida's Cooperative Extension Service internship program is intended for college juniors, seniors, and college graduates. It is six weeks long and interns are paid $12 per hour with the goal of exposing students to the work of Extension educators in a county office (University of Florida, 2008). The program has been in place for five years with approximately 15 former interns now Extension educators (N.T. Place, personal communication, April 4, 2007). Purdue University's Cooperative Extension Service internship program is similar except their internship period is longer at 8 to10 weeks and the interns are paid $12.50 per hour. The interns also complete a project and present it at the Indiana State Fair (Purdue University, 2008).

Internships

Zanville and Markwood (1982) list three stages of development internship programs go through: birth, growth and development, and stabilization. The Oklahoma Cooperative Extension program is currently in the birth stage. This stage is described as "newly-developed, starting from scratch to build a staff, locate students and sponsors, and develop procedures to keep the new program flowing" (p. 125). Usually in this stage, the program begins small and contacts established programs to gain insight into how these other programs are conducted. Once the program has established operating procedures, growth is typically fast (Zanville & Markwood). The growth and development stage is characterized as expanding while looking at ways to improve and establish a solid base of support. Stabilization is when the program has conducted some evaluation.

Students pursue internships as a way to learn (Patterson, 1997). "The ideal internship is an opportunity for students to engage in real-world ambiguities, paradoxes, and conflicts and still maintain commitments to one's self and one's profession without becoming dogmatic" (Clark, 2003, p. 473). Neapolitan (1992) cited the Conference on Undergraduate Internships as listing the four major functions of internships as vocational development, intellectual development, personal growth, and community service.

The ability to gain confidence and develop expertise in an area is a benefit of internships (Henry, Rehwaldt, & Vineyard, 2001). Knouse, Tanner, and Harris (1999) found internships improved the opportunity to have a job at graduation and increased academic performance. The increase in academic performance may be attributed to time management, communication skills, self-discipline, initiative, and a better self-concept developed during the internship.

The first few weeks of the internship make the difference in the experience for the interns and mentors. Beard and Morton (1999) reviewed research related to internships and found six predictors of successful internships. The predicators are academic preparedness, proactivity/aggressiveness, positive attitude, the quality of worksite supervision, organizational practices and policies, and compensation. In this study, the predictors of a successful internship were rated in the following order from most important to least by interns: quality of supervision, organizational practices/policies, positive attitude, academic preparedness, proactivity/aggressiveness, and compensation.

Orientation for the intern to the worksite is an important part of starting the internship off right. Zanville and Markwood (1982) listed the following components of orientation to the work site: Tour of the organization, introduction to staff, review of agency, review of intern's work assignments, assignment to work area, reporting schedule, answering the intern's questions, and any other concerns. By completing these tasks, the adjustment and transition to the workplace will be smoother for the intern and mentor.

Benefits of a well organized internship include:

> The student's ability to integrate academic knowledge with practical applications, improve job/career opportunities after graduation, create relevance for past and future classroom learning, develop work place social and human relation skills, and provide the opportunity for students to apply communication and problem solving skills (Beard, 2007, p. 208).

McCaffery (1979) lists benefits of internship programs for universities as a way to test the curriculum to real-world needs and the advertisement of the strength of their program.

Benefits of completing an internship according to criminal justice interns include an easier transition from college to work, career clarification, and enhanced employment opportunities for students (Stone & McLaren, 1999).

Evaluating the success of an internship is a complicated subject. Jones, Wu, and Hargrove (2002) discussed the use of a Return on Investment analytical measurement for internships. It is currently used in human resource development to track the "impact of a training effort through calculating the costs of training (the investment) and the benefits of training (the return)" (p.160). However, it is important to remember the investment is not necessarily in monetary value. Non monetary values would include increased status among peers and within the community. Jones et al. gave the following academic advisor example to explain this concept:

> The students want you to give her some 'hard' ideas on whether she should select a $10 per hour summer job flipping burgers at an internationally known fast food joint, or a $7 per hour internship at an internationally known hybrid corn research station in their genetic lab. Perhaps a few facts about return on investment would be helpful (p. 164).

Program evaluation is important in determining the success of a program. Beard and Morton (1999) cited literature that supports the evaluation of a successful internship having acquisition of technical skills, career-related benefits, career focus, acquisition of interpersonal skills, and outcomes of a more practical nature for the interns. This is usually measured by collecting data, both quantitative and qualitative, continuously on the program's progress and impacts so improvements can be made. This includes looking at results, outcomes, and impacts on a periodic basis (Zanville & Markwood, 1982).

One means for determining if a company is getting a good return on its investment is to look at the conversion of interns into full-time employees, employee retention, repeat requests for students, increase or decrease in productivity, student feedback, and management satisfaction with the program (Patterson, 1997). Another factor to consider is whether the cost-per-hire has decreased by hiring interns.

Mentoring and Internship Stages

Mentoring is an important component of internships. In order for an internship to be successful and educational, certain guidelines should be followed when mentoring. The literature points to Inkster and Ross's (1998) six guidelines in order to have effective mentoring in an internship. They include (1) Know the intern's learning objectives which include having the intern reflect upon experiences and how they apply to the learning objectives. (2) Provide frequent, specific, descriptive feedback, both positive and negative. This can be accomplished with scheduled meetings between the intern and mentor. (3) Encourage the intern to be an active problem solver by asking what they suggest and the positive and negative aspects of their suggestions. (4) If a problem occurs, it is most effective to communicate directly with the intern. Be sure to listen to what the intern has to say. (5) Be aware of your role of power in the relationship and strive to empower the intern. (6) Use support available from the academic contact if you are unsure about how to handle a situation that occurs.

Interns experience different stages emotionally while completing an internship. One model is Inkster and Ross's (1995, 1998) six stages of intern development. Stage 1 is arranging and anticipating the internship where the student is excited, yet hesitant about

their ability to do the job. Stage 2 is where orientation and the establishment of an identity occur. The intern is taken in by the new surroundings and tends to feel overwhelmed or under whelmed. Stage 3 is a critical stage when the intern realizes the reality of the work situation. Stage 4 is characterized by increased learning and productivity by the intern. Stage 5 occurs near the end of the internship and concerns the intern's closure with the internship site. The last stage is called re-entry and practical application where the interns return to school or look for employment.

Diambra, Cole-Zakrzewski, and Booher (2004) compared three different internship stage models to human service interns' experience. By sharing internship stage models with students, they can be proactive and aware of emotions during an internship. Diambra et al. compared Inkster and Ross's (1995, 1998) six stage model, Sweitzer and King's (1994, 1995) five stage model, and Kiser's (2000) four stage model. Inkster and Ross's six stages have been discussed. Sweitzer and King's five intern stages are anticipation, disillusionment, confrontation, competence, and culmination. Kiser's four stages include pre-placement, initiation, working, and termination. Inkster and Ross's model was found to be the best model. The six stage model has a combination of emotions and activities while still maintaining an orderly progression through the internship. By recognizing these stages, a smoother internship experience for both the intern and mentor can occur.

Diambra et al. (2004) stressed "the importance of ongoing communication and a mutual of internship components for a successful internship experience" (p. 193). Their study of intern stage models found weeks 2 and 9 of a 14 week internship were the low points for the interns. Weeks 13 and 14 had the highest ratings of satisfaction. By

recognizing when low and high points may occur, mentors and interns can be aware and prepare for the situation. Overall the interns in the study rated the internship high and considered it an influential component of their coursework even though there were low points.

Beard (2007) shared her insights about what makes an internship experience successful from her experience as an internship coordinator. She suggests students identify their goals and objectives for the internship in the beginning. They should reflect on the experience and how it has changed them. Another suggestion is to have the interns keep weekly journals and at the conclusion of the internship, write a paper and make a presentation about their experience. Her advice to employers or mentors is to develop guidelines for the interns. These guidelines "should include an orientation of the student to the world of work, identification of professional level duties and tasks of significant quality and quantity" (p. 212). Beard stressed that feedback should be used in improving the internship experience.

Internships do not always run smoothly. Inkster and Ross (1995) list problems that may occur and how mentors should be aware of potential pitfalls. Examples are conflict between supervisor and intern, student lack of responsibility, interns being assigned busy work, personal/emotional problems, and burnout by being overworked. In a study of criminal justice interns, nearly 10% of the interns felt their mentor was not helpful and some interns felt they were being used as 'gophers' (Ross & Elechi, 2002). A lack of understanding between the intern and internship location can also lead to disappointment for both parties (Cannon & Arnold, 1998).

Why do people choose to mentor others? Parilla and Hesser (1998) state that supervisors volunteer to serve as a mentor because of their own personal interests. A good supervisor for an intern is committed to the educational goals of the internship, can communicate effectively, and have the ability and willingness to mentor a student (Parilla & Hesser). Other mentoring qualities to look for in people suggested by Patterson (1997) include finding employees who are enthusiastic about the program, have technical expertise, interpersonal skills, and are comfortable providing feedback to students. Patterson also recommends letting mentors know the demands of the internship program so they are not surprised by the commitment it takes. In a study by Seevers et al. (1996), interns recommended that an intensive mentoring orientation should occur before the internship begins.

Mentoring has benefits for those who participate. Inkster and Ross (1995) found mentors or supervisors may be transformed in subtle ways when hosting an intern. These transformations may include increase knowledge of developments in the field, renewed enthusiasm for career, and increased creativity (Inkster & Ross). Stone and McLaren (1999) found by hosting an intern, mentors find their ideas and attitudes refreshed and are exposed to new innovative ideas.

Career Skills

The development of skills and abilities is a potential benefit of completing an internship for students. Inkster and Ross (1995) feel the main value in completing an internship is the contribution it makes to a student's intellectual and ethical growth. Internships allow students to use their classroom knowledge as a probe for new

experiences and evaluate classroom learning from a different perspective (Inkster & Ross). This is important as "People skills, credibility, and earning peer/clientele respect will always bring success to our changing organization [Cooperative Extension]" (Cooper & Graham, 2001, para. 32).

Supervisors who were satisfied when hosting interns found the interns tended to be eager, enthusiastic, motivated, dependable, and flexible (Inkster & Ross, 1998). The interns' skills in job-related knowledge, creativity, writing ability, and interpersonal skills were valued by the supervisors (Inkster & Ross). Internships allow students to develop human relation skills while gaining employability and marketable job skills (Kerka, 1989). Ross and Elechi (2002) stated students are able to improve their writing and analytical skills through internships while making contacts with future employers.

A study comparing the skills prospective employers and university faculty feel new business school graduate need found similarities and differences (Tanyel, Mitchell, & McAlum, 1999). The employers felt skills needed (in order of importance) were responsibility and accountability, ethical values, interpersonal skills, oral communication, time management and punctuality, the ability to work in team, and decision making and analytical ability. The faculty felt responsibility and accountability, oral communications, interpersonal skills, written communication, creativity and critical thinking, time management and punctuality, and decision making and analytical ability were most important. The employers and faculty were asked to rank their top three skills and abilities desired in graduates. The employers listed interpersonal skills, ethical values, and responsibility and accountability while the faculty felt interpersonal skills, ethical

values and responsibility and accountability (tie), and decision making and analytical ability were the top skills.

Kelley and Gaedeke's 1990 study (as cited in Gault et al., 2000) listed six skills that were important to both students and employers in career preparation. The skills were oral communication, written communication, problem solving, analytical skills, computer applications, and leadership/teamwork skills. Six additional skills cited by Gault et al. include creative thinking, job networking, relationship building, job interviewing, resume writing, and proposal writing. The skills were then categorized into four career skill categories: communication skills, academic skills, leadership skills, and job acquisition skills.

College of agriculture graduates felt the employability skill of problem-solving and analytic was in the greatest need of curriculum enhancement (Robinson, Garton, & Vaughn, 2007). The remaining skills graduates believed needed curriculum enhancement included motivation, lifelong learning, creativity, innovation, and change, organization and time management, visioning, decision making, and listening (Robinson et al.). The study asked the supervisors of the graduates what curriculum enhancements were needed for employability skills (Robinson et al.). The supervisors also named problem-solving and analytic as needing the most enhancement. Other skills listed were risk taking, motivation, managing conflict, decision making, lifelong learning, listening, organization and time management, and creativity, innovation, and change.

The skills developed from an internship through Cooperative Extension according to Moseley and Balschweid (2003) are working and interacting with people, program preparation and planning, communication, teamwork, and an understanding of the rules

and policies. These findings are based on their research with interns through Purdue Cooperative Extension Service.

Internships as an Employment Vehicle

Students participating in internships view them as a way to obtain a competitive edge in the marketplace and offer valuable experience for them (Cannon & Arnold, 1998). Internships allow students the opportunity to "practice and improve their ability to view the world" (Parilla & Hesser, 1998, p. 311). Patterson (1997) state students "test-drive professions and [are] introduce[d] to professional work environments" (p. 32) during internships.

An internship can offer students real work experience, exploration of new careers, contacts for future employment searches, enhanced classroom learning, increased motivation, and practice in job hunting (Stanton, 1992). Internships can bridge the gap between classroom learning and employment while providing high-quality employees with minimal recruitment costs, and develop a relationship between companies and universities (Gault et al., 2000). Internships are also a way for students to bridge academic knowledge with future careers (Stedman et al., 2006).

Skill and ability development from an internship may assist a student in landing their first job. A benefit of hiring interns is hiring someone with experience with the company therefore creating a minimal learning curve if they become permanent employees (Patterson, 1997). Hewlett-Packard believes strongly in their internship program and as a result hired 70% of its new hires from its intern pool one year (Watson, 1995).

Beard (2007) reported a lower turnover rate for new hires that had internship experience. She also found students gain confidence in a professional work setting and feel they can succeed and contribute in a work environment because of internship experience. The internship experience also increases the awareness of interns about other career options previously not considered (Neapolitan, 1992). A study done by Ross and Elechi (2002) sought to explore student views about criminal justice internships. They found the internship experience was viewed as an important way of preparing students for future careers. Some interns discovered careers they did not want to pursue.

Internship experience allows students to clarify their career goals (Kerka, 1989). Neapolitan (1992) in a study with sociology interns found the internship experience provided valuable information to students in making a sound career choice. Students, both current and graduates and college placement directors agree that the most effective college recruitment strategy is internships (Scott, 1992). Students view internships as a way to learn about a career they are considering (Scott).

A study by Gault et al. (2000) compared intern and non-intern business alumni and their early career success. Their study found alumni, with internship experience, had significantly earlier career advantages than those who had not completed an internship. These alumni also reported better preparation in job acquisition skills and obtained employment quicker. Interns were found to have higher extrinsic success such as higher starting salaries (9.23% higher) and shorter time to find a job than non interns (Gault et al.). The shorter time to find a job may be attributed to better job acquisition skills from the internship. There was not a significant difference between interns and non interns for intrinsic success. However, interns reported higher job satisfaction than non interns. In

terms of career preparation, interns felt they had a higher level of preparation in computer applications, creative thinking, job interviewing, job networking, and relationship building due to the internship experience.

Companies that agree to host interns view them as potential future employees, inexpensive help, and a source of new, fresh ideas (Cannon & Arnold, 1998; Ross & Elechi, 2002). Stone and McLaren (1999) agree that interns are looked at as potential employees. Companies and students can use the internship experience to determine if they are a good fit for each other (Scott, 1992). Internships provide companies a recruiting pool, part-time and special project employees while improving the company's image and developing connections with universities (Beard, 2007).

Neapolitan (1992) stated the importance of internships is discovering whether a career choice is right or wrong for the student. Neapolitan's study found the interns were more likely to be sure of their career choice, whether it was finding careers they did not want to enter or considering new options. The interns also said they made contacts for the future while acquiring general knowledge. The results also showed the interns were less anxious about entering the workforce after the internship experience.

Findings from a study with interns from different academic departments, Taylor (1988) suggested internships provide students with less reality shock, better employment opportunities, and a better feel of self-concept and work values when they prepare to enter the workforce. Interns tended to receive higher starting salaries, while having more satisfaction with their new job (Taylor). This study also found that interns with internship experience were viewed to be more qualified for jobs than those students without an internship experience (Taylor).

Employers need to consider the training costs of new employees. Becker (1964) discusses investing in human capital as "the activities that influence future real income through the imbedding of resources in people" (p. 1). Investment may be in the form of schooling, training, acquirement of knowledge, etc. as long as the mental and physical abilities of people increase, causing their future productivity to increase (Becker).

When new employees are hired, very little about the employee's skills and abilities is known. The new employee is therefore trained in a variety of areas or in one specific area to increase his/her knowledge. The funding source for this employee training becomes an important consideration. Becker (1964) gives the following example about human capital with regard to training:

> If a firm had paid for the specific training of a worker who quit to take another job, its capital expenditure would be partly wasted, for no further return could be collected. Likewise, a worker fired after he had paid for specific training would be unable to collect any further return and would also suffer a capital loss. The willingness of workers or firms to pay for specific training should, therefore, closely depend on the likelihood of labor turnover (p. 21).

If a trained employee leaves, the company suffers a loss because a new employee with the same skills would be difficult to find. Therefore, the company would have to make additional investments to train the new employee (Becker).

Self-Efficacy

Perceived self-efficacy is a judgment of a person's belief about their ability to produce effects (Bandura, 1997). These "beliefs determine how people feel, think,

motivate themselves and behave" (Bandura, 1994, p.71). It is not a measurement of skills (Bandura). People with high self-efficacies believe in their ability and set challenging goals and are committed to completing them as well as recovering quickly after a failure (Bandura, 1994, 1997). Those with low self-efficacy avoid difficult tasks; have low aspirations, weak commitment to goals. They tend to dwell on their shortcomings, obstacles, and give up easily (Bandura). Self-efficacy is not set, but changes throughout the lifespan.

Bandura (1994) states there are four main sources that influence on a person's self-efficacy development. These include mastery experiences, vicarious experiences, social persuasion, and reducing stress reactions. Mastery experiences are when a person overcomes a difficult challenge, believes that they can succeed and perseveres. Vicarious experiences are considered modeling or when a person watches someone in a similar position succeed or fail. Social persuasion is when success is measured in self-improvement, not in triumphs over others. Reducing stress reactions involve having a positive mood and reducing stress. Bandura (1997) states "people differ both in the areas in which they cultivate their efficacy and in the levels to which they develop it even within their chosen pursuits" (p. 36).

Beliefs about personal self-efficacy have an effect on career development (Bandura, 1997). Gault et al. (2000) cite previous studies where the interns had positive changes in their feelings of personal and social efficacy. These interns also felt a greater sense of responsibility and career development. Kerka (1989) stated students' self-reliance, self-confidence, and responsibility increase after an internship experience.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to establish baseline data for the Oklahoma Cooperative Extension Service internship program. This chapter describes the methodology that was used to accomplish the objectives of the study, which were to:

1. Describe the demographic characteristics of the interns and mentors.
2. Describe the interns' and mentors' attitudes toward the Cooperative Extension Service.
3. Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy.
4. Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities throughout the internship.

Institutional Review Board

Oklahoma State University and federal government regulations require review and approval of all research studies which involve human subjects before any research work may begin. The Oklahoma State University Institutional Review Board conducts

these reviews to protect the rights and welfare of human subjects involved in research. In compliance with this policy, an Institutional Review Board application was submitted and approved. It was assigned application number AG0719 (see Appendix A).

Research Design

The research design of this study was mixed methods, consisting of both qualitative and quantitative research methods. This study used the triangulation mixed methods design which "is simultaneously collecting quantitative and qualitative data" (Creswell, 2005, p. 514). Quantitative data was collected through questionnaires while qualitative data was collected through intern's journals. Pre test data was collected May 2, 2007 before the internship began, mid test data was collected the middle of June, post test data was collected the middle of August after completion of the internship, and post-post test data was collected in January 2008.

The variables of this study include the intern and mentor attitudes toward the Cooperative Extension Service, the intern's self-efficacy throughout the internship, and intern and mentor assessments of the intern's skills and abilities. The objectives of this study address these variables.

Subject Selection

Population

This study employed a census population; therefore, no sampling was required. The population consisted of 12 Oklahoma Cooperative Extension Service interns for the summer of 2007. The interns were college juniors, seniors, and graduate students at

Oklahoma State University from varying backgrounds and degree programs. The mentor population consisted of 18 Oklahoma Cooperative Extension Service educators (mentors) with varying staffing assignments. Any county educator who interacted with the interns was asked to complete the post test assessment. This yielded 25 responses. The interns typically worked with more than one educator in a county, creating a larger mentor population.

The interns and mentors both completed applications to participate in the internship program. The interns were selected through an application and interview process to participate in a paid 10-12 week internship through the Oklahoma Cooperative Extension Service. The interns and mentors were selected and paired up by a panel of Oklahoma Cooperative Extension personnel not associated with this study. The researcher did not take part in the selection of interns or the pairing process. The interns' application deadline was March 1, 2007. There were 29 intern applications submitted. Interviews were held March 12, 2007 and 22 applicants were interviewed with the final 12 interns selected from this group.

The county office internship sites were selected through an application process with applications due March 1, 2007. Each county had at least one educator as the supervising educator of the intern. These educators were required to have at least two years of experience with the Oklahoma Cooperative Extension Service. There were 13 county applications. Figure 2 is a map with the counties who hosted interns shaded.

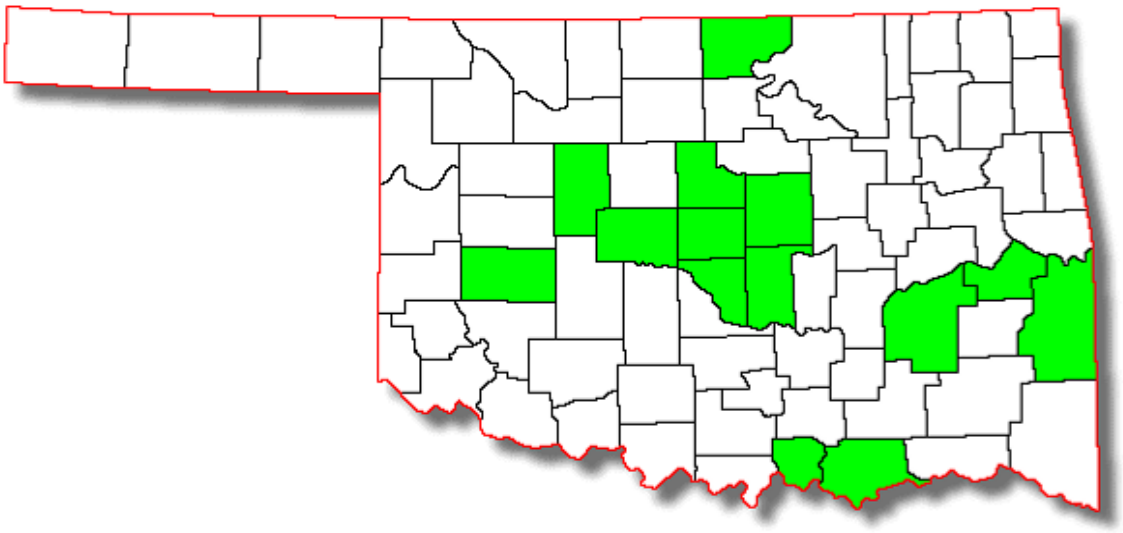


Figure 2. Map of internship host counties.

Instrumentation

The following section describes the instruments and methods of collecting data for the interns and mentor assessments. A summary of all instrumentation, administration date, and location of the instrument in the appendix is provided in Table 1. Instruments are located in the appendix by test administration.

Table 1

Summary of Instrumentation and Administration

Instrument	Target Audience	Date Administered	How Administered	Appendix
Demographics	Intern	March, 2007	Application	C
Journal	Intern	Weekly	E-mail	D
Attitude	Intern	May, 2007	In-person	E
Self-Efficacy	Intern	May, 2007	In-person	E
Assessment	Intern	May, 2007	In-person	E
Self-Efficacy	Intern	June, 2007	Online	F
Attitude	Intern	August, 2007	Online	G
Self-Efficacy	Intern	August, 2007	Online	G
Assessment	Intern	August, 2007	Online	G
Attitude	Intern	January, 2008	Online	H
Self-Efficacy	Intern	January, 2008	Online	H
Demographics	Mentor	May, 2007	Mail	J
Assessment	Mentor	May, 2007	Mail	J
Attitude	Mentor	May, 2007	Mail	J
Assessment	Mentor	August, 2007	Online	K
Attitude	Mentor	August, 2007	Online	K

Interns

Intern letter

An introduction letter (see Appendix B) signed by the Interim Assistant Director and State 4-H Program Leader and the researcher was given to each intern informing them of the study. It also informed them of the type of instruments used in the study. The Institutional Review Board requirements as well as consent forms were also included.

The Interim Assistant Director and State 4-H Program Leader was the contact person for the interns throughout the duration of the internship.

Internship Journal

The internship journal instrument was developed by the researcher for use during this study (see Appendix D) and constituted the qualitative portion of the study. Journals were submitted weekly by the interns. Interns were asked to express their thoughts, successes, and frustrations experienced during the internship program. The interns were instructed to write about their experience with no prompts given. The data was used to triangulate the data collected from the questionnaires.

Attitudes toward the Cooperative Extension Service

The instrument used to assess attitudes toward the Cooperative Extension Service in this study was developed as a semantic differential scale by Gruntmeir (1999). Osgood, Suci, and Tannenbaum (1957) state a semantic differential scale is a reliable and valid way to measure attitude. The instrument was titled Attitudes toward the Cooperative Extension Service and consisted of 14 pairs of polar opposite words. Gruntmeir used a panel of experts and a pilot study to determine the validity and reliability of the instrument. Varimax rotation was used to determine the loadings of the word pairs in Gruntmeir's study. All pairs with loadings below 0.42 were eliminated from the original instrument leaving 14 of 20 word pairs on the final instrument.

Each question on the instrument had a possible score of one to seven. A score of four would indicate the respondent was neutral on the word pair; a score less than four would indicate the respondent favored the first term, while a score greater than four indicate the respondent favored the second term. The entire instrument and scale can be

found in Appendix E. Then the interns were instructed to answer the questions on how they perceived the Cooperative Extension Service to be, not how it should be. The word pairs on the instrument were divided into two categories, traditional and contemporary Extension services. Six word pairs were reversed on the instrument to avoid bias. The pairs that were reversed are noted in the accompanying table.

Gruntmeir's semantic differentail was used because it was an established instrument previously used for measuring attitudes about the Cooperative Extension Service. The data from this study can be compared to data collected from Extension Educators who have been administered the instrument (Gruntmeir, 1999). The semantic differential was administered three times to the interns, before beginning the internship (pre), immediately after the internship was completed (post), and five months after internship completion (post-post).

Extension Educator's Self – Efficacy Inventory (EESE)

The Extension Educator's Self-Efficacy Inventory is based on the General Perceived Self-Efficacy Scale and the School Administrator Self-Efficacy Scale. The instrument was developed by Gruntmeir (1999) and consisted of 22 self-efficacy questions on a Likert scale ranging from 1 to 6. The General Perceived Self-Efficacy Scale consists of 10 questions and was developed by Schwarzer and Born (1998). It is a widely used instrument and is available in numerous languages. Scholz, Dona, Sud, and Schwarzer (2002) reported internal consistencies between alpha .75 and .91 from a population in 25 different countries. Convergent and discriminate validity was established by Gruntmeir. All 10 items from the General Perceived Self-Efficacy Scale were used on the self-efficacy instrument.

The instrument also used 12 questions from the School Administrator Self-Efficacy Scale developed by Roberts (1997) from the expertise area. Roberts defined the expertise area as the "level a person believes they possess the knowledge to be effective" (p. 54). Roberts reported Cronbach's alpha showed the internal consistency was 0.85 for the expertise items on the School Administrator Self-Efficacy Scale. Face and content validity on these items was established by a panel of experts in Gruntmeir's (1999) study. Minor changes to the wording of the School Administrator Self-Efficacy Scale to describe an Extension Educators' job more effectively were made by Gruntmeir. Cronbach's alpha for the general and expertise portions for this study are reported in the findings.

The self-efficacy instrument was administered four times. Table 1 contains the exact timeline for the pre, mid, post, and post-post assessments. Only the first 10 questions were administered pre test because the expertise portion required internship experience. The evaluation of how self-efficacy of interns changed over the course of the internship experience was measured. This instrument was chosen because it was already established and had been administered successfully to current Extension Educators in a previous study (Gruntmeir, 1999).

Intern Internship Assessment

The Intern Internship Assessment instrument used was a modified version of the Indiana INTERNnet Final Internship Assessment by Student instrument. Approval to use a modified version of this instrument was received from Indiana INTERNnet. This assessment is used at Purdue University to evaluate their Cooperative Extension Service interns and consists of a Likert scale ranging from 1 to 5 which measure responses for 25

statements regarding skills and abilities. There are five categories each containing five statements. The categories consist of initiative, teamwork, communication skills, problem solving/decision making skills, and self management. It was administered to the interns twice during this study, pre and post internship. Minor changes to the original wording were made. Cronbach's alpha for the general and expertise portions for this study are reported in the findings.

Mentors

Mentor letter

The mentors were emailed a notice about the study and then mailed a letter (see Appendix I) that explained the study and its purpose. Mentors were also informed of the instruments to be used in the study. The Institutional Review Board protocol and consent forms were included in this mailing. The letter was signed by the Interim Assistant Director and State 4-H Program Leader and the researcher.

Demographics

Demographic data collected from the mentors included gender, age, staffing assignment, years of service with Cooperative Extension Service, and prior mentoring experience. This portion of the instrument was developed by the researcher and was only administered at the beginning of the study.

Internship Assessment by Mentor

The Internship Assessment by Mentor instrument employed in the study was a modified version of the Indiana INTERNnet Final Internship Assessment by Employer Supervisor instrument. It contained the same questions as the interns' assessment. This

instrument was given twice during the internship period. It was administered one week into the internship experience and after completion of the internship.

Attitudes toward the Cooperative Extension Service

The instrument used for this portion of the study was developed by Gruntmeir (1999) as a semantic differential scale. It is identical to the instrument administered to the interns. The instrument is called Attitudes toward the Cooperative Extension Service and consists of 14 pairs of polar opposite words. The validity and reliability of the instrument was determined by a panel of experts and a pilot study. Gruntmeir used a Varimax rotation to determine the loadings of the word pairs. All pairs with loadings below .42 were eliminated from the original instrument leaving 14 on the final instrument. The 14 word pairs were divided into a traditional and contemporary services classification. Six word pairs were reversed on the instrument to avoid bias.

This instrument was selected because it was an already established instrument used for measuring attitudes about the Cooperative Extension Service. The data from this study can be compared to data collected from Extension Educators who have been administered the instrument in other studies. It was administered twice to the mentors at the beginning of the internship and after the internship was completed.

Data Collection Procedures

The demographic information about the interns was collected from their internship application. The interns were brought together for a pre-internship meeting on May 2, 2007 on the Oklahoma State University – Stillwater campus. The researcher spoke to the interns about the study and its purpose. Institutional Review Board

information was provided and the protection of their privacy was explained. The interns were provided the cover letter and consent forms. After consenting to participate, the interns were administered the Attitudes toward the Cooperative Extension Service, Extension Educator's Self-Efficacy Inventory (the first 10 questions of the instrument), and the Intern Internship Assessment instruments. The interns were instructed to complete the instruments pertaining to their perceptions of their thoughts or skills levels, not their expectations from the internship. These instruments were then collected.

The weekly journal was also explained to the interns at this meeting. The expectations and requirements of the journal were discussed. The interns were told to write about the good and bad aspects of the internship, their frustrations, thoughts on improvements, and what they liked and disliked about being an intern. The researcher collected the journals weekly and followed up to ensure that all interns participated.

At the half way mark of the internship, which was the week of June 16, 2007, the interns were emailed a link to the Extension Educator's Self-Efficacy Inventory instrument containing all 22 items. After the completion of the internship, the week of August 6, 2007, the interns were asked once again to complete the Attitudes toward the Cooperative Extension Service, Extension Educator's Self-Efficacy Inventory, and the Internship Assessment by Interns instruments online. The post-post test for the attitudes and self-efficacy instruments were completed online from January 1st thru 9th, 2008. All instruments were returned and completed by the interns. All 12 interns responded to the pre, mid, post, and post-post test assessments.

The mentors were contacted by email by the researcher. They were mailed the cover letter, consent forms, and instruments. Demographic, Attitudes toward the

Cooperative Extension Service, and Internship Assessment by the Mentor instruments were completed one week after the intern started and mailed back. After completion of the internship, the mentors were asked to complete the Attitudes toward the Cooperative Extension Service and Internship Assessment by the Mentor instruments online. A summary of when and how instruments were administered is shown in Table 1. The 18 educators who were identified as internship mentors at the beginning of the internship experience responded to the pre test. A total of 25 Extension professionals completed the post test instruments as seven additional educators self selected based on their informal mentoring of the interns. The 18 mentors who completed the pre test instruments also completed all post test instruments.

Data Analysis

Data collected from the interns consisted of three questionnaires instruments administered three times with the exception of the Extension Educator's Self-Efficacy Inventory, which was administered four times. Data from the mentors was collected at pre and post internship using two instruments.

The study used descriptive statistics. The data was compiled in a Microsoft Excel spreadsheet. Mean and standard deviation were calculated using Excel formulas. The standard deviation formula in Excel used was STDEVP. Cronbach's Alpha was calculated using the statistical software package SPSS for the self-efficacy and assessment instruments. The qualitative data collected from the weekly journals was analyzed to determine common themes. The themes are reported in the findings and key statements are reported to support the findings.

CHAPTER IV

FINDINGS

The purpose of this study was to establish baseline data for the Oklahoma Cooperative Extension Service internship program. Established instruments were used to establish the baseline data. This chapter presents the analysis of data collected from the 12 interns and 18 Extension Educators who participated in the study.

Findings Related to Objective 1

Intern Demographics

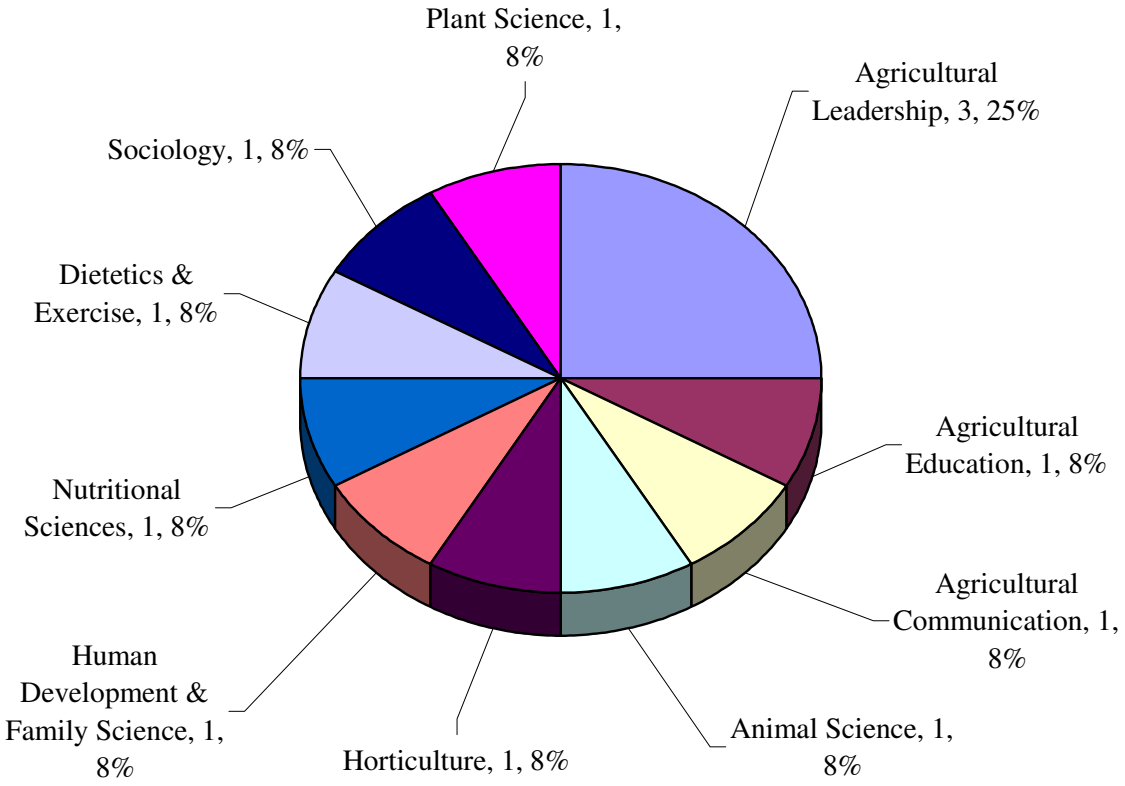
Objective 1 related to demographic information about the interns and mentors. The interns consisted of nine females (75%) and three males (25%). Their highest level of educational attainment ranged from completion of sophomore year of college to completion of one year of graduate school as shown in Table 2.

Table 2

Highest Level of Educational Attainment of Interns

Education level	No. of Interns
Bachelor of Science Degree & graduate credit hours	2
Bachelor of Science Degree	1
≥ 90 undergraduate credit hours	7
≥ 60 undergraduate credit hours	2

Intern majors included agricultural communications, agricultural education, agricultural leadership, animal science, horticulture, human development and family science, nutritional sciences, dietetics and exercise, sociology, and plant science. The most common major was agricultural leadership with three interns (25%) as shown in Figure 3. Agricultural education, agricultural communication, and agricultural leadership make up one department at Oklahoma State University. The remaining majors are housed in seven different departments, in three different academic colleges. The College of Agricultural Sciences and Natural Resources had the largest number of student interns.



Note. Percentages do not equal 100% due to rounding.

Figure 3. Interns' academic majors.

Five of the 12 interns indicated they had some previous interactions or experience with the Cooperative Extension Service. The interns with prior experience reported it being with the 4-H youth development program.

Mentor Demographics

Demographic information for the mentors is reported in Table 3. The 18 mentors who participated in this study consisted of 11 males (61%) and 7 females (39%). The majority of the mentors held master's degrees (72%). There was one PhD (6%) with the remaining mentors holding a bachelors degree (22%). Mentors ranged in age from 26 years old to 60 years old with the average age being 45 years old. The median age was 45 and the mode was 42. The program areas or staffing assignments of the mentors consisted of 4-H youth development, agriculture, family and consumer science, and rural and community development. Six educators had more than one program area for their staffing assignment. The majority (72%) had 4-H as part of their staffing assignment, followed by agriculture (33%), family and consumer science (28%), and rural and community development (11%). The average length of time served as an Extension Educator was 14 years. The years of service ranged from 3 years to 33 years, with a median of 12 years of service. The majority (83%) reported having mentored before, yet only 28% reported having received training in mentoring as shown in Table 4.

Table 3

Demographics of Cooperative Extension Service Mentors

	Frequency	Percent
Gender		
Male	11	61.1
Female	7	38.9
Highest Degree Held		
Bachelors	4	22.2
Masters	13	72.2
PhD	1	5.6
Age		
20-29	2	11.1
30-39	4	22.2
40-49	5	27.8
50-59	6	33.3
60-69	1	5.6
Staffing Assignment		
4-H Youth Development	7	38.9
Agriculture	3	16.7
4-H and Family and Consumer Sciences	3	16.7
Family and Consumer Sciences	2	11.1
4-H and Rural and Community Development	2	11.1
4-H and Agriculture	1	5.6
Years of Experience with Extension		
1-10 years	7	38.9
11-20 years	6	33.3
21-30 years	4	22.2
31-40 years	1	5.6

Table 4

Self Described Mentoring Experience of Extension Educators

	Frequency	Percent
Previous Mentoring experience?		
Yes	15	83.3
No	3	16.7
Completed Mentoring Training?		
Yes	5	27.8
No	13	72.2

Findings Related to Objective 2

Intern Attitudes

Objective 2 findings are related to the attitudes toward Cooperative Extension Service for the interns and mentors. The interns' attitude toward the Cooperative Extension Service was measured pre, post, and post-post internship. Each question on the semantic differential had a possible score of one to seven. A score of four would indicate the respondent was neutral on the word pair; a score less than four would indicate the respondent favored the first term, while a score greater than four indicate the respondent favored the second term. The entire instrument and scale can be found in Appendix E. The interns were instructed to answer the questions on how they perceived the Cooperative Extension Service to be, not how it should be. The word pairs on the instrument were divided into two categories, traditional and contemporary Extension services. Six word pairs were reversed on the instrument to avoid bias. The pairs that were reversed are noted in the accompanying tables.

Pre test means for the interns ranged from 3.00 to 5.58 as shown in Table 5. For the pre test, the responses favored the traditional Extension services (with means in parentheses) of rural (3.00) over urban, education (3.33) over facilitation, minimizing risk (3.67) over taking risk, grassroots initiatives (3.75) over top-down initiatives, and brainstorming (3.92) over structured analysis. Responses on the pre test favored the contemporary Extension services of advocacy (4.17) over neutrality, specialization (4.25) over generalization, complex (4.58) over simple, high tech (4.67) over low tech, challenging (4.75) over cautious, initiates change (4.92) over preserves the past, collaboration (5.50) over isolation, and flexible (5.58) over rigid. The word pairing of controlled/autonomous had a mean of 4.00, making it a neutral word pair.

Intern means for the post test ranged from 3.00 to 5.58 as shown in Table 6. For the post test, traditional services that were favored (with means in parentheses) include minimizing risk (3.00), rural (3.08), education (3.33), simple (3.75), grassroots initiatives (3.83), generalization (3.92), and brainstorming (3.92). Contemporary services that were favored include challenging (4.08), high tech (4.08), advocacy (4.17), autonomous (4.33), initiates change (4.58), collaboration (4.92) and flexible (5.58).

Table 5

Means, Standard Deviations, and Frequency on Semantic Differential for Interns' Attitudes toward the Cooperative Extension Service (Pre test) (N=12)

Traditional						*Contemporary*			
	1	2	3	4	5	6	7	μ	σ
Rural		4	4	4				Urban	3.00	0.82
Education		1	7	3	1			Facilitation	3.33	0.75
*Minimizing risk		1	5	3	3			*Taking Risk	3.67	0.94
Grassroots Initiatives		1	5	4		2		Top-Down Initiatives	3.75	1.16
Brainstorming		1	3	5	2	1		Structured analysis	3.92	1.04
*Controlled		1	2	7	1		1	*Autonomous	4.00	1.15
Neutrality			4	4	2	2		Advocacy	4.17	1.07
Generalization		1	2	4	3	2		Specialization	4.25	1.16
Simple			2	5	2	2	1	Complex	4.58	1.19
*Low Tech		2		3	2	5		*High Tech	4.67	1.43
*Cautious			1	3	6	2		*Challenging	4.75	0.83
*Preserves the past			1	4	3	3	1	*Initiates change	4.92	1.11
Isolation				2	3	6	1	Collaboration	5.50	0.87
*Rigid				2	3	5	2	*Flexible	5.58	0.95

Note. An asterisk (*) denotes word pair that was reversed.

Table 6

Means, Standard Deviations, and Frequency on Semantic Differential for Interns' Attitudes toward the Cooperative Extension (Post test) (N=12)

	Traditional				*Contemporary*					
	1	2	3	4	5	6	7		μ	σ
*Minimizing risk		4	4	4				*Taking Risk	3.00	0.82
Rural		4	4	3	1			Urban	3.08	0.95
Education		3	3	5	1			Facilitation	3.33	0.94
Simple		1	3	6	2			Complex	3.75	0.83
Grassroots Initiatives		1	2	8		1		Top-Down Initiatives	3.83	0.90
Generalization		3	2	3	1	3		Specialization	3.92	1.50
Brainstorming	1		1	7	3			Structured analysis	3.92	1.04
*Cautious		1	3	3	4	1		*Challenging	4.08	1.11
*Low Tech			3	6	2	1		*High Tech	4.08	0.86
Neutrality		3		3	4	2		Advocacy	4.17	1.40
*Controlled		2		5	3	1	1	*Autonomous	4.33	1.37
*Preserves the past			1	6	2	3		*Initiates change	4.58	0.95
Isolation			1	4	2	5		Collaboration	4.92	1.04
*Rigid				3	1	6	2	*Flexible	5.58	1.04

Note. An asterisk (*) denotes word pair that was reversed.

The post-post test means as shown in Table 7 had a range of 2.50 to 5.33. The traditional services that were favored (with means in parentheses) include rural over urban (2.50), education over facilitation (3.00), neutrality over advocacy (3.33), generalization over specialization (3.42), brainstorming over structured analysis (3.50), minimizing risk over taking risk (3.83), simple over complex (3.83), and grassroots initiatives over top-down initiatives (3.92). Contemporary services favored were high tech over low tech (4.08), challenging over cautious (4.17), initiates change over preserves the past (4.58), autonomous over controlled (4.67), collaboration over isolation (4.92), and flexible over rigid (5.33).

Differences in means are shown in Table 8 for pre test versus post test. The word pairs education/facilitation, brainstorming/structured analysis, neutrality/advocacy, and rigid/flexible did not have a change in mean from pre to post test. Means for these word pairs were 3.33, 3.92, 4.17, and 5.58, respectively. The word pairs grassroots initiatives/top-down initiatives, rural/urban, and controlled/autonomous increased in mean from pre to post test. The increase in mean was 0.08, 0.08, and 0.33, respectively. The remaining seven word pairs had a decrease in mean ranging from 0.33 to 0.83. The greatest change in mean, 0.83 was for the word pair simple/complex with a pre test mean of 4.58 and post test mean of 3.75. Generalization/specialization and preserves the past/initiates change had the smallest decrease in mean by 0.33.

Table 7

Means, Standard Deviations, and Frequency on Semantic Differential for Interns' Attitudes toward Cooperative Extension Service (Post-Post test) (N=12)

	Traditional				*Contemporary*					
	1	2	3	4	5	6	7		μ	σ
Rural	1	5	5	1				Urban	2.50	0.76
Education		5	4	2		1		Facilitation	3.00	1.15
Neutrality	1	2	3	4	2			Advocacy	3.33	1.18
Generalization		4	2	3	3			Specialization	3.42	1.19
Brainstorming	1	1	3	6		1		Structured analysis	3.50	1.19
*Minimizing risk			6	2	4			*Taking Risk	3.83	0.90
Simple		3	2	3	3		1	Complex	3.83	1.46
Grassroots Initiatives		2	3	4		3		Top-Down Initiatives	3.92	1.38
*Low Tech			3	6	2	1		*High Tech	4.08	0.86
*Cautious			5	3	2	1	1	*Challenging	4.17	1.28
*Preserves the past			1	6	2	3		*Initiates change	4.58	0.95
*Controlled			1	5	3	3		*Autonomous	4.67	0.94
Isolation		1	2	2	1	4	2	Collaboration	4.92	1.61
*Rigid				2	4	6		*Flexible	5.33	0.75

Note. An asterisk (*) denotes word pair that was reversed.

Table 8

Differences in Means for Attitudes toward the Cooperative Extension Service for Interns (Pre – Post Test)

		μ	μ	Difference
Traditional	*Contemporary*	Pre	Post	Pre-Post
Education	Facilitation	3.33	3.33	0.00
Brainstorming	Structured analysis	3.92	3.92	0.00
Neutrality	Advocacy	4.17	4.17	0.00
*Rigid	*Flexible	5.58	5.58	0.00
Generalization	Specialization	4.25	3.92	0.33
*Preserves the past	*Initiates change	4.92	4.58	0.33
Isolation	Collaboration	5.50	4.92	0.58
*Low Tech	*High Tech	4.67	4.08	0.58
*Cautious	*Challenging	4.75	4.08	0.67
*Minimizing risk	*Taking risk	3.67	3.00	0.67
Simple	Complex	4.58	3.75	0.83
Grassroots Initiatives	Top-Down Initiatives	3.75	3.83	(0.08)
Rural	Urban	3.00	3.08	(0.08)
*Controlled	*Autonomous	4.00	4.33	(0.33)

Note. An asterisk (*) denotes word pair that was reversed. A lower number favors seeing Extension Services as more traditional while a higher number favors contemporary Extension Services.

Differences in means from the pre test to the post-post test had a few increases and numerous decreases as shown in Table 9. The greatest increase in mean was 0.67 for the word pair controlled/autonomous. Minimizing risk/taking risk and grassroots initiatives/top-down initiatives also increased in mean by 0.16 and 0.17, respectively. The greatest decrease in mean was for the pairing neutrality/advocacy with a change of 0.84. The smallest decrease in mean was for pairing rigid/flexible with a change of 0.25. The other pairings had decreases ranging from 0.33 to 0.83.

Table 10 shows the differences in means for post test versus post-post test. Six pairs had a decrease in mean that ranged from 0.25 to 0.84. Neutrality/advocacy had the greatest decline while isolation/collaboration had the smallest decrease. The increase in mean ranged from 0.08 to 0.83. The greatest gain was for minimizing risk/taking risk while simple/complex had the smallest increase. Three word pairs (with means in parentheses), isolation/collaboration (4.92), low tech/high tech (4.08), and preserves the past/initiates change (4.58) did not have a change in mean from post to post-post test.

Table 9

Differences in Means for Attitudes toward the Cooperative Extension Service for Interns (Pre – Post-Post Test)

		μ	μ	Difference
Traditional	*Contemporary*	Pre	Post-Post	Pre-Post-Post
*Rigid	*Flexible	5.58	5.33	0.25
Education	Facilitation	3.33	3.00	0.33
*Preserves the past	*Initiates change	4.92	4.58	0.34
Brainstorming	Structured analysis	3.92	3.50	0.42
Rural	Urban	3.00	2.50	0.50
*Cautious	*Challenging	4.75	4.17	0.58
Isolation	Collaboration	5.50	4.92	0.58
*Low Tech	*High Tech	4.67	4.08	0.59
Simple	Complex	4.58	3.83	0.75
Generalization	Specialization	4.25	3.42	0.83
Neutrality	Advocacy	4.17	3.33	0.84
*Minimizing risk	*Taking risk	3.67	3.83	(0.16)
Grassroots Initiatives	Top-Down Initiatives	3.75	3.92	(0.17)
*Controlled	*Autonomous	4.00	4.67	(0.67)

Note. An asterisk (*) denotes word pair that was reversed. A lower mean favors traditional Extension Services while a higher mean favors contemporary Extension Services.

Table 10

Differences in Means for Attitudes toward the Cooperative Extension Service for Interns (Post – Post-Post Test)

		μ	μ	Difference
Traditional	*Contemporary*	Post	Post-Post	Post-Post-Post
Isolation	Collaboration	4.92	4.92	0.00
*Low Tech	*High Tech	4.08	4.08	0.00
*Preserves the past	*Initiates change	4.58	4.58	0.00
*Rigid	*Flexible	5.58	5.33	0.25
Education	Facilitation	3.33	3.00	0.33
Brainstorming	Structured analysis	3.92	3.50	0.42
Generalization	Specialization	3.92	3.42	0.50
Rural	Urban	3.08	2.50	0.58
Neutrality	Advocacy	4.17	3.33	0.84
Simple	Complex	3.75	3.83	(0.08)
*Cautious	*Challenging	4.08	4.17	(0.09)
Grassroots Initiatives	Top-Down Initiatives	3.83	3.92	(0.09)
*Controlled	*Autonomous	4.33	4.67	(0.34)
*Minimizing risk	*Taking risk	3.00	3.83	(0.83)

Note. An asterisk (*) denotes word pair that was reversed. A lower mean favors traditional Extension Services while a higher mean favors contemporary Extension Services.

Mentor

Mentors completed the Attitude toward Cooperative Extension Service instrument that was identical to the interns' instrument. The mentors' attitude toward the Cooperative Extension Service was measured pre and post internship. The mentors were

to answer the questions on how they perceived the Cooperative Extension Service to be, not how it should be.

The pre test data for the mentors is shown in Table 11. The means for the pre test ranged from 2.39 to 5.11. For the pre test, the responses favored the traditional services (with means in parentheses) of minimizing risk over taking risk (2.39), education over facilitation (2.78), grassroots initiatives over top-down initiatives (2.94), rural over urban (3.00), neutrality over advocacy (3.17), cautious over challenging (3.72), and generalization over specialization (3.94). Contemporary services favored included autonomous over controlled (4.06), flexible over rigid (4.22), high tech over low tech (4.39), initiates change over preserves the past (4.44), structured analysis over brainstorming (4.56), complex over simple (4.72), and collaboration over isolation (5.11).

Mentor post test attitude scores had means ranging from 2.78 to 5.11 as shown in Table 12. Traditional services favored in the post test included (with means in parentheses) education (2.78), minimizing risk (3.00), rural (3.17), neutrality (3.22), grassroots initiatives (3.56), and controlled (3.72). Contemporary services favored include high tech (4.17), specialization (4.22), initiates change (4.22), structured analysis (4.28), complex (4.89), and collaboration (5.11). Two pairs, cautious/challenging and rigid/flexible had means of 4.00, making them neutral word pairs.

Table 11

Means, Standard Deviations, and Frequency on Semantic Differential for Mentors' Attitudes toward Cooperative Extension Service (Pre-test) (N=18)

Traditional					*Contemporary*					
	1	2	3	4	5	6	7		μ	σ
*Minimizing risk	3	9	4		2			*Taking risk	2.39	1.11
Education	3	4	5	6				Facilitation	2.78	1.08
Grassroots Initiatives	4	6	3	2		1	2	Top-Down Initiatives	2.94	1.90
Rural	2	1	10	5				Urban	3.00	0.88
Neutrality	3	4	2	6	2	1		Advocacy	3.17	1.46
*Cautious	1	1	7	4	3	2		*Challenging	3.72	1.28
Generalization	1	1	5	6	2	2	1	Specialization	3.94	1.43
*Controlled		1	4	8	3	2		*Autonomous	4.06	1.03
*Rigid	1	3	3	2	5	1	3	*Flexible	4.22	1.81
*Low Tech		1	5	4	2	6		*High Tech	4.39	1.34
*Preserves the past		1	3	7	2	4	1	*Initiates change	4.44	1.30
Brainstorming		1	3	5	3	6		Structured analysis	4.56	1.26
Simple			1	8	4	5		Complex	4.72	0.93
Isolation			1	6	3	6	2	Collaboration	5.11	1.15

Note. An asterisk (*) denotes a word pair that was reversed.

Table 12

Means, Standard Deviations, and Frequency on Semantic Differential for Mentors' Attitudes toward Cooperative Extension Service (Post-test) (N=18)

Traditional							*Contemporary*		
	1	2	3	4	5	6	7	μ	σ
Education	2	8	5	1		1	1	Facilitation	2.78	1.51
*Minimizing risk	2	7	1	6	1	1		*Taking risk	3.00	1.37
Rural	2	2	7	5	2			Urban	3.17	1.12
Neutrality	5	2	1	7		3		Advocacy	3.22	1.75
Grassroots Initiatives	3	3	5	1	2	2	2	Top-Down Initiatives	3.56	1.95
*Controlled	3		6	2	5	1	1	*Autonomous	3.72	1.66
*Cautious	2	1	4	3	5	2	1	*Challenging	4.00	1.63
*Rigid	2	3	3		5	5		*Flexible	4.00	1.80
*Low Tech	1	1	3	4	7	2		*High Tech	4.17	1.30
Generalization		2	4	5	2	5		Specialization	4.22	1.36
*Preserves the past		2	3	5	5	3		*Initiates change	4.22	1.23
Brainstorming	1	1	5	3	2	5	1	Structured analysis	4.28	1.63
Simple		1		7	4	4	2	Complex	4.89	1.24
Isolation	1		1	4	3	6	3	Collaboration	5.11	1.52

Note. An asterisk (*) denotes a word pair that was reversed.

Table 13 shows the differences between pre and post test for the mentors on the attitude instrument. The word pairs of education/facilitation and isolation/collaboration did not have a change in mean from pre to post test. Means for these word pairs were 2.78 and 5.11, respectively. Seven word pairs increased in mean from pre to post test with increases from 0.05 to 0.62. The smallest increase was for the word pair neutrality/advocacy with a pre test mean of 3.17 and post test mean of 3.22. Grassroots initiatives/top-down initiatives had the largest increase (0.62) with pre-post test means of 2.94 and 3.56, respectively. The remaining five word pairs had a decrease in mean ranging from 0.22 to 0.34. The greatest mean decrease was for the pairing controlled/autonomous. The pre test mean was 4.06 and the post test mean was 3.72. Three word pairs decreased by 0.22, which were (with pre and post test means in parentheses) preserves the past/initiates change (4.44, 4.22), low tech/high tech (4.39, 4.17), and rigid/flexible (4.22, 4.00). The remaining word pair, brainstorming/structured analysis, decreased by 0.28.

Table 13

Differences in Means for Attitudes toward the Cooperative Extension Service for Mentors (Pre-Post Test)

		μ	μ	Difference
Traditional	*Contemporary*	Pre	Post	Pre-Post
Education	Facilitation	2.78	2.78	0.00
Isolation	Collaboration	5.11	5.11	0.00
*Preserves the past	*Initiates change	4.44	4.22	0.22
*Low Tech	*High Tech	4.39	4.17	0.22
*Rigid	*Flexible	4.22	4.00	0.22
Brainstorming	Structured analysis	4.56	4.28	0.28
*Controlled	*Autonomous	4.06	3.72	0.34
Neutrality	Advocacy	3.17	3.22	(0.05)
Rural	Urban	3.00	3.17	(0.17)
Simple	Complex	4.72	4.89	(0.17)
Generalization	Specialization	3.94	4.22	(0.28)
*Cautious	*Challenging	3.72	4.00	(0.28)
*Minimizing risk	*Taking risk	2.39	3.00	(0.61)
Grassroots Initiatives	Top-Down Initiatives	2.94	3.56	(0.62)

Note. An asterisk (*) denotes a word pair that was reversed. A lower mean favors traditional Extension Services while a higher mean favors contemporary Extension Services. The scale ranged from 1 to 7.

Findings Related to Objective 3

Intern Self-Efficacy

Objective 3 sought to measure the self-efficacy of the interns at various points during the internship. The self-efficacy portion of the study is reported in two ways, the sum of the raw scores by intern (sum of the whole numbers) and the mean and standard deviation by question. Sum of the raw scores is how self-efficacy scores are usually reported (Bandura, 1997). Scoring was on a scale ranging from 1 = strongly agree to 6 = strongly disagree. Points for questions 1-10 determined the general self-efficacy score, while questions 11-22 points determined the expertise self-efficacy score for each intern. Questions 1-22 were given mid, post, and post-post internship with questions 1-10 given pre test also.

The first 10 questions on the self-efficacy instrument represented general self-efficacy. The scores possible range was 10-60 with lower scores representing a higher self-efficacy and higher scores representing a lower self-efficacy. Table 14 shows the raw scores as well as changes for questions 1-10.

The scores for the pre test ranged from 15 to 33, with a mean of 21.08. The mean for the mid test was 18.92 with scores ranging from 12 to 30. The post test mean decreased slightly to 18.58 with scores ranging from 11 to 32. The post-post test scores ranged from 12 to 29 with a mean of 17.58. The high score (low self-efficacy) for all four testing times was from the same intern. Additionally, the low score (high self-efficacy) for three of the four testing times were for the same intern. The changes in general self-efficacy for questions 1-10 is shown in Figure 4.

Table 14

Intern General Self-Efficacy Raw Scores and Changes

Intern ID	Pre	Mid	Post	PostPost	Pre-Mid Change	Pre-Post Change	Pre-PostPost Change	Mid-Post Change	Mid-PostPost Change	Post-PostPost Change
1	21	16	11	13	(5)	(10)	(8)	(5)	(3)	2
2	24	23	24	20	(1)	__	(4)	1	(3)	(4)
3	17	19	14	16	2	(3)	(1)	(5)	(3)	2
4	33	30	32	29	(3)	(1)	(4)	2	(1)	(3)
5	24	20	18	14	(4)	(6)	(10)	(2)	(6)	(4)
6	18	17	16	18	(1)	(2)	__	(1)	1	2
7	17	17	14	13	__	(3)	(4)	(3)	(4)	(1)
8	17	17	14	15	__	(3)	(2)	(3)	(2)	1
9	24	16	20	21	(8)	(4)	(3)	4	5	1
10	15	12	14	12	(3)	(1)	(3)	2	__	(2)
11	18	16	16	19	(2)	(2)	1	__	3	3
12	25	24	30	21	(1)	5	(4)	6	(3)	(9)
μ	21.08	18.92	18.58	17.58						

Note. The scale ranges from 10-60 with lower numbers representing a higher self-efficacy. A dash indicates no change in self-efficacy while a positive number indicates a loss in self-efficacy and a negative number indicates an increase in self-efficacy.

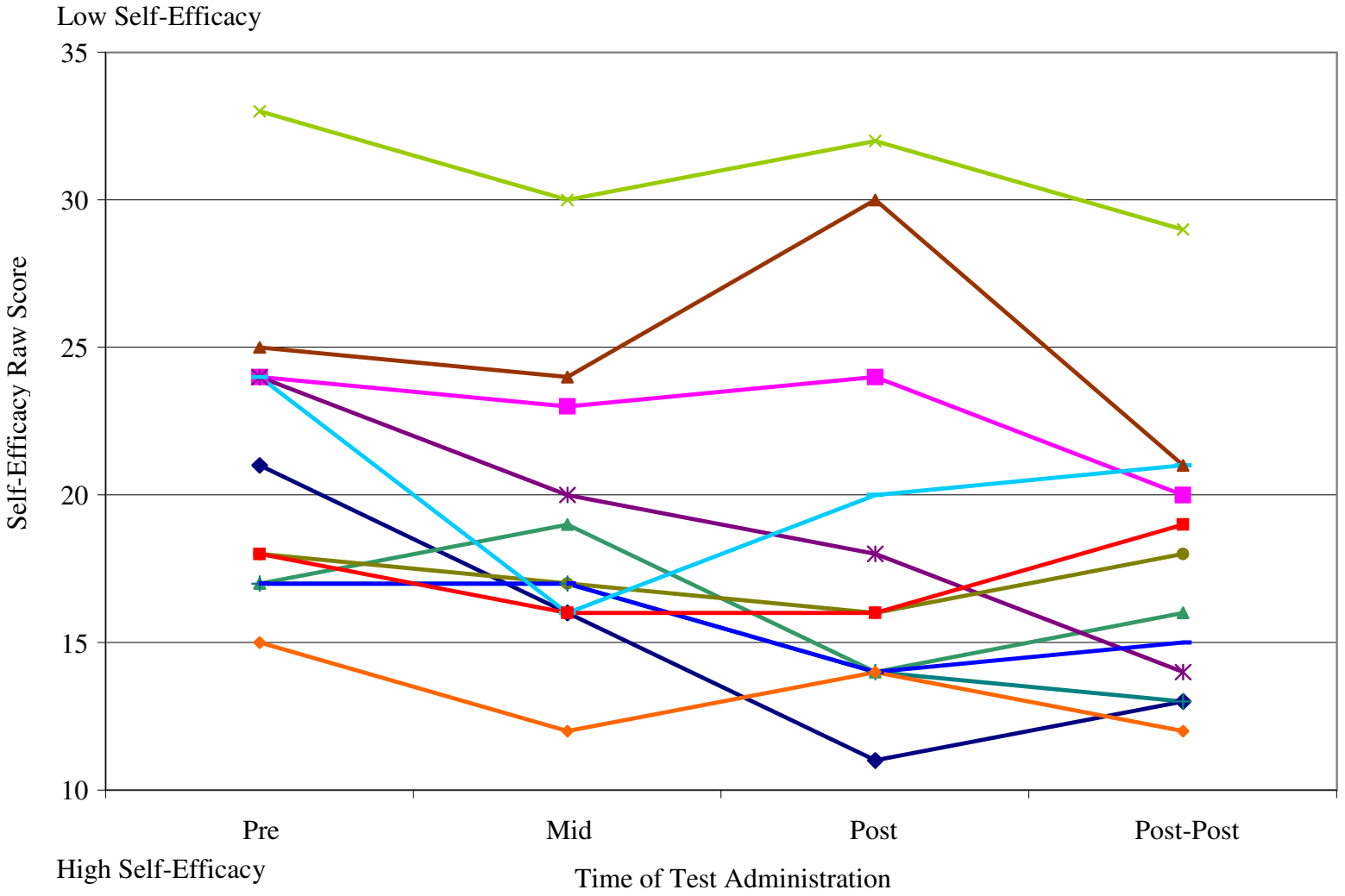


Figure 4. Intern general self-efficacy raw scores.

From pre to mid test, the scores dropped by 1 to 8 whole numbers (increase in self-efficacy) while two interns had no change. One intern had a decrease in self-efficacy by 2 whole numbers. Pre to post test had similar results as pre to mid test with increases in self-efficacy from 1 to 10 whole numbers. One intern had no change while one decreased in self-efficacy by 5 whole numbers. Pre to post-post test had increases in self efficacy ranging from 1 to 10 whole numbers. One intern had no change while one decreased in self-efficacy by 1 whole number. From mid to post test one intern did not have any change while six interns increased in self-efficacy by 1 to 5 whole numbers. Five interns decreased in self-efficacy by 1 to 6 whole numbers. Mid to post-post test had increases in self-efficacy by 1 to 6 whole numbers and decreases by 1 to 5 whole numbers. There was one intern with no change. Post to post-post test had six interns increase in self-efficacy from 1 to 9 whole numbers while six interns decreased by 1 to 3 whole numbers.

Questions 11 through 22 on the self-efficacy scale represented the Extension Educator expertise section of the self-efficacy instrument. A scale ranging from 12-72 was used to evaluate these scores. A lower score indicated a high self-efficacy while a higher score represented a lower self-efficacy. These questions were not given pre-test because the interns needed experience in Cooperative Extension in order to answer the questions. The mid test had scores ranging from 12 to 41 with a mean of 23.08. The post test mean was 20.67 with scores ranging from 14 to 36. The post-post test had means ranging from 15 to 28 with an average mean of 20.67. Table 15 shows the raw scores and changes for questions 11-22.

Table 15

Intern Expertise Self-Efficacy Raw Scores and Changes

Intern ID	Mid	Post	Post-Post	Mid-Post Changes	Mid-Post Post Changes	Post-Post Post Changes
1	17	15	15	(2)	(2)	__
2	31	17	23	(14)	(8)	6
3	12	14	18	2	6	4
4	28	28	27	__	(1)	(1)
5	41	23	21	(18)	(20)	(2)
6	25	22	19	(3)	(6)	(3)
7	14	16	16	2	2	__
8	26	20	24	(6)	(2)	4
9	19	26	28	7	9	2
10	15	15	16	__	1	1
11	15	16	17	1	2	1
12	34	36	24	2	(10)	(12)
μ	23.08	20.67	20.67			

Note. The scale is from 12-72 with lower numbers representing a higher self-efficacy and dashes indicating no change in self-efficacy.

Mid to post test had five interns increase (decrease in score) in self-efficacy ranging from 2 to 18 whole numbers. Two interns had no change while five had a decrease (increase in score) in self-efficacy from 1 to 7 whole numbers. Increases in self-efficacy from mid to post-post test ranged from 2 to 20 whole numbers for seven interns while 5 interns decreased in self-efficacy from 1 to 9 whole numbers. Post to post-post test had two interns with no change in self-efficacy, four interns with an increase in self-efficacy by 1 to 12 whole numbers, and six interns with a decrease in self-efficacy by 1 to 6 whole numbers. The changes are shown in Figure 5.

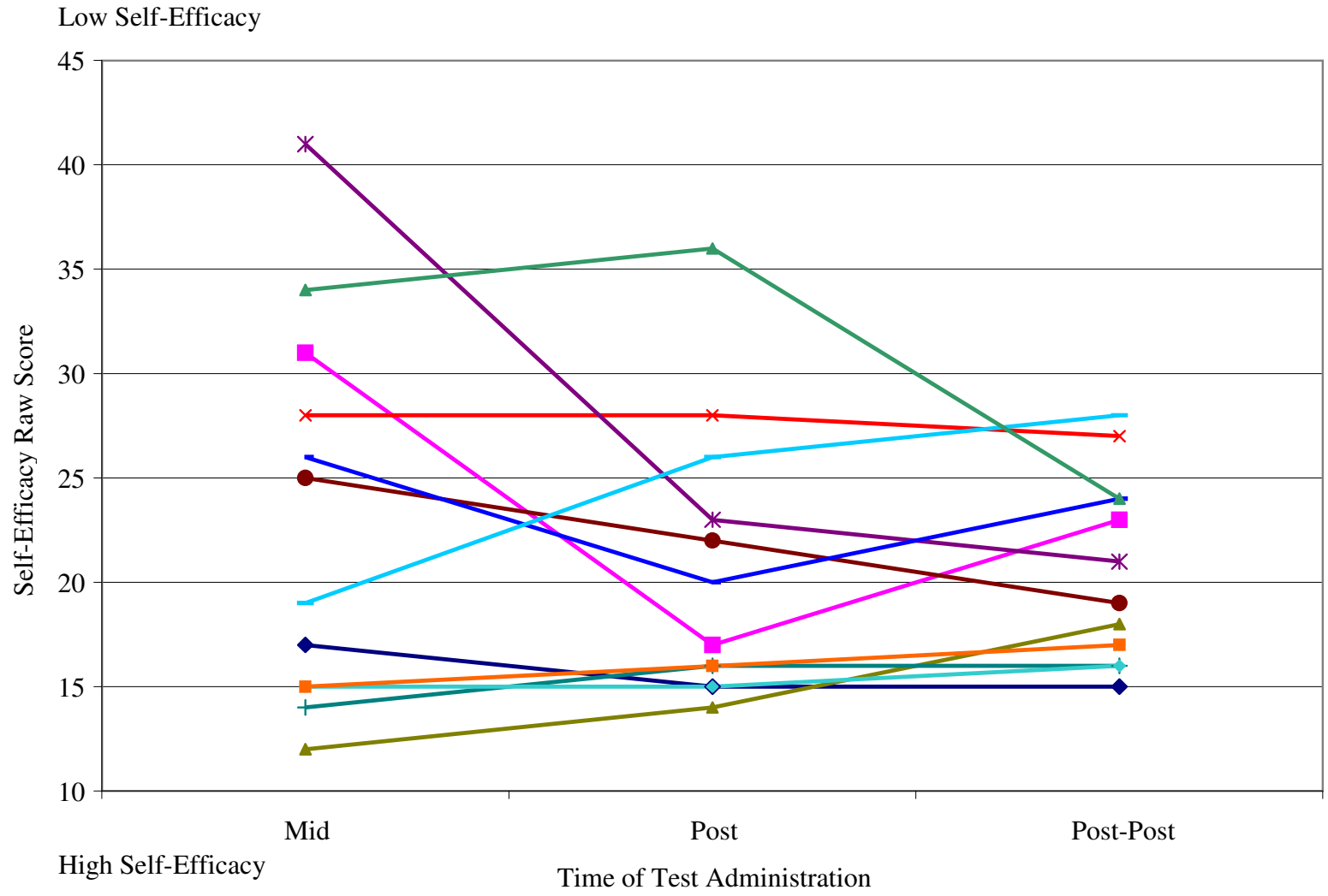


Figure 5. Intern expertise self-efficacy raw scores.

Qualitative data related to self-efficacy were categorized as interacting with people and program planning. The following quotes were taken from the interns' weekly journals and relate to the interns' interaction with people. The interns experienced various interactions with people, including clientele, co-workers, volunteers, youth, and parents.

Interns reported working with community members and clientele can be a rewarding experience, depending on the nature of the interaction. Working with a educator and deriving the same answer for a client's problem was a confidence booster for interns. The connection that is made between classroom learning and real-life is also exciting for them to experience. Intern 2 stated "I REALLY loved going out to a client's home to help identify an issue in their yard. It made me feel good that I was able to come up with the same answer as the county Ag educator. I'm enjoying visiting people's homes and seeing the differences in different areas of the county, as well as seeing in real life some of the problems I have been learning about in classrooms."

Volunteers are an important component of Cooperative Extension program areas. Interns reported working with volunteers can be encouraging for a younger generation. It allows them to know people do care and want them to succeed. Intern 2 said "I enjoyed actually doing things with the public more than anything so far. I really enjoyed seeing all the volunteers being excited about all the things their 4-H'ers were doing and wanted to do in the future. It was great to know that there were so many adults out there looking forward to the success of the youth around the state."

Not all interactions with people are positive however. The experience with difficult people can be good or bad, depending on how the situation is handled. By witnessing how others diffuse a situation is a learning experience and provides an

example to refer back to when experiencing a similar situation. While at a horse show, Intern 6 encountered upset parents and volunteers and wrote “Every educator kept a cool head and calmly dealt with the parents’ concerns. This really reinforced in me the importance of remaining calm when dealing with parents and volunteers.”

Working and assisting people can be a rewarding, yet educational experience. Intern 6 also stated after going on a client visit with the Extension educator “I learned a lot about dealing with different personality types. This also reinforced to me that Extension is about serving people. I realize in some counties’ that educators feel that it isn’t necessary to make house calls, but I think it’s important to get to know your clientele and your community. I’m sure it meant the world to those people that someone cared enough to come to their home and visit about their problems.”

Qualitative data related to program planning involved interns developing and teaching programs to volunteers, youth, and peers. The importance of adequate program planning and preparation was reinforced during the internship. Sometimes the best way to learn is by trial and error and making mistakes. Intern 11 stated “In college, we were taught about program planning over and over but now that I have gotten to put it to use, I was able to make mistakes and learn from them.” Being organized and keeping up with what is going on can become time consuming and difficult. Intern 6 said after being out of the office a few days for meetings “I now understand how important it is to be able to spend some time in the office to catch up on phone calls and e-mails, work on program planning and evaluation, see clientele, and get organized!”

Numerous interns perceived they improved their teaching ability and confidence in teaching over the course of the internship. Communication when working with groups

was also improved. By teaching and being in front of groups, confidence as a presenter and speaker developed. Intern 6 stated “Kid’s Fitness Camp has really helped my teaching confidence.” She also said “It was [a] really good experience to have to conduct a lesson in front of your peers” while attending a conference. Intern 8 wrote “I have slowly gained confidence in my ability to teach farmers and cattlemen. I [was] worried that they would be more knowledgeable than I am. I have found that they read the same publications I do.” Intern 10 said “I gained experience on how to teach and keep the kids entertained during my workshop.” She was left in charge of an event and wrote “It was kind of nice because it built my confidence in teaching.” This qualitative data supports the self-efficacy increase in the interns.

The self-efficacy instrument was also analyzed in terms of means for each statement. A lower mean indicted a higher self-efficacy for that statement from the intern’s perspective. The scale ranged from 1 = strongly agree to 6 = strongly disagree. The mean for each statement on the pre-test (consisting of questions 1-10) is shown in Table 16. Statement 6 had the smallest mean (1.50) while statement 2 had the highest mean (3.42). The eight remaining statements had a mean in the range of 1.67 to 2.17.

The mid-test consisted of questions 1-10 of the general section and the additional 12 questions of the expertise section. Table 17 shows the frequency table for the mid-test for questions 1-10. Looking at questions 1-10, the lowest mean was 1.25 for statement 6 while the highest mean was 2.83 for statement 2. The remaining eight statements fell into the range of 1.58 to 2.00. Table 18 shows the frequency table for questions 11-22 for the mid test. The means ranged from 1.17 to 2.33. The lowest mean was for statement 22

Table 16

Intern General Self-Efficacy Frequency Table (Pre test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
6. I can solve most problems if I invest the necessary effort.	7	4	1				1.50	0.65
4. I am confident that I could deal efficiently with unexpected events.	5	6	1				1.67	0.62
1. I can always manage to solve difficult problems if I try hard enough.	3	7	1	1			2.00	0.82
5. Due to my resourcefulness, I know how to handle unforeseen situations.	2	8	2				2.00	0.58
10. No matter what comes my way, I am usually able to handle it.	3	6	3				2.00	0.71
3. It is easy for me to stick to my aims and accomplish my goals.	3	5	4				2.08	0.76
7. I remain calm when facing difficulties because of my coping abilities.	6	2	2	1	1		2.08	1.32
8. Confronted with a problem, I can usually find several solutions.	2	6	4				2.17	0.69
9. If I am in trouble, I can usually think of something to do.	3	5	3	1			2.17	0.90
2. If someone opposes me, I can find means and ways to get what I want.			9	1	2		3.42	0.76

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 17

Intern General Self-Efficacy Frequency Table (Mid test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
6. I can solve most problems if I invest the necessary effort.	9	3					1.25	0.43
1. I can always manage to solve difficult problems if I try hard enough.	6	5	1				1.58	0.64
4. I am confident that I could deal efficiently with unexpected events.	4	8					1.67	0.47
10. No matter what comes my way, I am usually able to handle it.	3	9					1.75	0.43
8. Confronted with a problem, I can usually find several solutions.	3	8	1				1.83	0.55
3. It is easy for me to stick to my aims and accomplish my goals.	2	8	2				2.00	0.58
5. Due to my resourcefulness, I know how to handle unforeseen situations.	3	6	3				2.00	0.71
7. I remain calm when facing difficulties because of my coping abilities.	4	6	1		1		2.00	1.08
9. If I am in trouble, I can usually think of something to do.	5	3	3	1			2.00	1.00
2. If someone opposes me, I can find means and ways to get what I want.		4	7		1		2.83	0.80

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 18

Intern Expertise Self-Efficacy Frequency (Mid test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
22. Educators make a difference when they handle the tasks of their job.	10	2					1.17	0.37
13. I am able to make effective presentations to groups.	6	3	3				1.75	0.83
14. I am able to clarify and restate client's concerns in a helpful manner.	5	5	2				1.75	0.72
21. I am able to handle the unexpected events that arise during the day.	6	3	3				1.75	0.83
11. I have the skills necessary to be an effective leader.	5	3	4				1.92	0.86
12. I have the diagnostic skills to assess the effectiveness of my programs.	6	2	3	1			1.92	1.04
17. I am skillful at scheduling activities involving my job.	5	5	1		1		1.92	1.11
18. If an event runs smoother than usual, it's because I exerted extra effort.	3	5	4				2.08	0.76
19. My skills working with groups allow effective and efficient work.	4	4	3	1			2.08	0.95
20. If a client becomes angry or upset with me, I can handle their outburst	4	5	2		1		2.08	1.11
15. It is easy to write effective professional correspondence and memos.	3	3	5	1			2.33	0.94
16. When people become involved, it is because I enlist their help.	2	5	4	1			2.33	0.85

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

while the highest mean of 2.33 was for statements 15 and 16. The remaining nine statements were broken up evenly among the means of 1.75, 1.92, and 2.08.

The post test frequency table is shown in Table 19 for questions 1-10 and Table 20 for questions 11-22. For questions 1-10, the lowest mean was for statement 6 at 1.50. The highest mean was 2.75 for statement 2. The remaining statements had means ranging from 1.58 to 1.92. Questions 11-22 had means ranging from 1.33 to 2.08. The lowest mean was for statement 22 while statements 16 and 18 had the highest mean. The remaining statements had means ranging from 1.50 to 1.83.

Table 21 shows the post-post test for questions 1-10 had means ranging from 1.33 to 2.50. The lowest mean was for statement 4 while the highest mean was for statement 2. Eight remaining statements had means ranging from 1.50 to 1.92. Table 22 shows questions 11-22 had post-post test means from 1.33 to 2.08 with statement 22 having the lowest mean and statement 18 having the highest mean. The remaining 10 statements had a range of 1.42 to 2.00.

Table 19

Intern General Self-Efficacy Frequency Table (Post test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
6. I can solve most problems if I invest the necessary effort.	7	4	1				1.50	0.65
4. I am confident that I could deal efficiently with unexpected events.	7	3	2				1.58	0.76
5. Due to my resourcefulness, I know how to handle unforeseen situations.	7	2	3				1.67	0.85
1. I can always manage to solve difficult problems if I try hard enough.	4	7	1				1.75	0.60
3. It is easy for me to stick to my aims and accomplish my goals.	4	7	1				1.75	0.60
7. I remain calm when facing difficulties because I of my coping abilities.	7	2	2		1		1.83	1.21
8. Confronted with a problem, I can usually find several solutions.	3	7	2				1.92	0.64
9. If I am in trouble, I can usually think of something to do.	5	5	1		1		1.92	1.11
10. No matter what comes my way, I am usually able to handle it.	5	3	4				1.92	0.86
2. If someone opposes me, I can find means and ways to get what I want.		5	6		1		2.75	0.83

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 20

Intern Expertise Self-Efficacy Frequency Table (Post test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
22. Educators make a difference when they handle the tasks of their job.	9	2	1				1.33	0.62
21. I am able to handle the unexpected events that arise during the day.	7	4	1				1.50	0.65
11. I have the skills necessary to be an effective leader.	7	4	1				1.58	0.76
13. I am able to make effective presentations to groups.	6	5	1				1.58	0.64
17. I am skillful at scheduling activities involving my job.	6	4	2				1.67	0.75
12. I have the diagnostic skills to assess the effectiveness of my programs.	4	7	1				1.75	0.60
14. I am able to clarify and restate clients' concerns in a helpful manner.	5	5	2				1.75	0.72
19. My skills working with groups allow effective and efficient work.	5	5	2				1.75	0.72
20. If a client becomes angry or upset with me, I can handle their outbursts	5	5	2				1.75	0.72
15. It is easy to write effective professional correspondence and memos.	4	6	2				1.83	0.69
16. When people become involved, it is because I enlist their help.	3	5	4				2.08	0.76
18. If an event runs smoother than usual, it's because I exerted extra effort.	2	7	3				2.08	0.64

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 21

Intern General Self-Efficacy Frequency Table (Post-Post test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
4. I am confident that I could deal efficiently with unexpected events.	8	4					1.33	0.47
6. I can solve most problems if I invest the necessary effort.	7	4	1				1.50	0.65
9. If I am in trouble, I can usually think of something to do.	7	4		1			1.58	0.86
10. No matter what comes my way, I am usually able to handle it.	4	8					1.67	0.47
1. I can always manage to solve difficult problems if I try hard enough.	3	9					1.75	0.43
5. Due to my resourcefulness, I know how to handle unforeseen situations	4	7	1				1.75	0.60
7. I remain calm when facing difficulties because of my coping abilities.	6	5			1		1.75	1.09
3. It is easy for me to stick to my aims and accomplish my goals.	3	8	1				1.83	0.55
8. Confronted with a problem, I can usually find several solutions.	3	7	2				1.92	0.64
2. If someone opposes me, I can find means and ways to get what I want.	1	7	2	1	1		2.50	1.04

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 22

Intern Expertise Self-Efficacy Frequency Table (Post-Post test) (N=12)

Statement	StA	MA	SlA	SlD	MD	StD	μ	σ
22. Educators make a difference when they handle the tasks of their job.	9	2	1				1.33	0.62
13. I am able to make effective presentations to groups.	7	5					1.42	0.49
21. I am able to handle the unexpected events that arise during the day.	6	6					1.50	0.50
11. I have the skills necessary to be an effective leader.	5	7					1.58	0.49
19. My skills working with groups allow effective and efficient work.	5	7					1.58	0.49
17. I am skillful at scheduling activities involving my job.	5	5	2				1.75	0.72
20. If a client becomes angry or upset with me, I can handle their outbursts.	5	5	2				1.75	0.72
12. I have the diagnostic skills to assess the effectiveness of my programs.	3	8	1				1.83	0.55
14. I am able to clarify and restate a client's concern in a helpful manner.	2	9	1				1.92	0.49
15. It is easy to write effective professional correspondence and memos.	2	9	1				1.92	0.49
16. When people become involved, it is because I enlist their help.	4	5	2	1			2.00	0.91
18. If an event runs smoother than usual, it is because I exerted extra effort.	3	5	4				2.08	0.76

Note. A low mean equals a high self-efficacy while a high mean equals a low self-efficacy; The scale used was: StA = Strongly Agree, MA = Moderately Agree, SlA = Slightly Agree, SlD = Slightly Disagree, MD = Moderately Disagree, StD = Strongly Disagree

Table 23 is a summary of means and changes throughout the internships for questions 1-10. Two statements (4 and 5) did not change in mean from pre to mid test while the remaining statements decreased in mean (increase in self-efficacy) by 0.08 to 0.59. Pre to post test had decreases in means from 0.08 to 0.67 except for statement 6 which did not change. Pre to post-post test also had decreases by 0.25 to 0.92 except for statement 6 which did not change. Mid to post test had decreases in mean by 0.08 to 0.33 for six statements and increases in mean (decrease in self-efficacy) for four statements by 0.09 to 0.25. Mid to post-post test had decreases in mean from 0.08 to 0.42 for seven statements and increases in mean for three statements ranging from 0.09 to 0.25. Post to post-post test had three statements with no change in mean, five statements with a decrease in mean by 0.08 to 0.34, and statements 3 and 5 with an increase in mean by 0.08.

Table 23

Intern General Self-Efficacy Summary of Means and Differences

Question	Pre μ	Mid μ	Post μ	Post Post μ	Pre-Mid Change	Pre-Post Change	Pre-Post Post Change	Mid-Post Change	Mid-Post Post Change	Post-Post Post Change
1	2.00	1.58	1.75	1.75	(0.42)	(0.25)	(0.25)	0.17	0.17	—
2	3.42	2.83	2.75	2.50	(0.59)	(0.67)	(0.92)	(0.08)	(0.33)	(0.25)
3	2.08	2.00	1.75	1.83	(0.08)	(0.33)	(0.25)	(0.25)	(0.17)	0.08
4	1.67	1.67	1.58	1.33	—	(0.09)	(0.34)	(0.09)	(0.34)	(0.25)
5	2.00	2.00	1.67	1.75	—	(0.33)	(0.25)	(0.33)	(0.25)	0.08
6	1.50	1.25	1.50	1.50	(0.25)	—	—	0.25	0.25	—
7	2.08	2.00	1.83	1.75	(0.08)	(0.25)	(0.33)	(0.17)	(0.25)	(0.08)
8	2.17	1.83	1.92	1.92	(0.34)	(0.25)	(0.25)	0.09	0.09	—
9	2.17	2.00	1.92	1.58	(0.17)	(0.25)	(0.59)	(0.08)	(0.42)	(0.34)
10	2.00	1.75	1.92	1.67	(0.25)	(0.08)	(0.33)	0.17	(0.08)	(0.25)

Note. A dash indicates no change in self-efficacy and a lower mean indicates a higher self-efficacy.

Questions 11-22 summary of means and changes is shown in Table 24. Mid to post test had decreases in mean ranging from 0.17 to 0.50 for nine statements. Statements 14 and 18 did not have a change in mean while statement 22 had an increase in mean (decrease in self-efficacy) by 0.16. Mid to post-post test statement 18 did not have a change in mean. Statements 14 and 22 increased in mean by 0.16 and 0.17 while the remaining nine statements decreased in mean by 0.09 to 0.50. Post to post-post test had statements 11, 18, 20, 21, and 22 which did not change in mean. Statements 13, 16, and 19 decreased in mean by 0.16, 0.08, and 0.17, respectively. Four statements increased in mean by 0.08 to 0.17.

Table 24

Intern Expertise Self-Efficacy Summary of Means and Differences

Question	Mid μ	Post μ	Post Post μ	Mid-Post Change	Mid-Post Post Change	Post-Post Post Change
11	1.92	1.58	1.58	(0.34)	(0.34)	—
12	1.92	1.75	1.83	(0.17)	(0.09)	0.08
13	1.75	1.58	1.42	(0.17)	(0.33)	(0.16)
14	1.75	1.75	1.92	—	0.17	0.17
15	2.33	1.83	1.92	(0.50)	(0.41)	0.09
16	2.33	2.08	2.00	(0.25)	(0.33)	(0.08)
17	1.92	1.67	1.75	(0.25)	(0.17)	0.08
18	2.08	2.08	2.08	—	—	—
19	2.08	1.75	1.58	(0.33)	(0.50)	(0.17)
20	2.08	1.75	1.75	(0.33)	(0.33)	—
21	1.75	1.50	1.50	(0.25)	(0.25)	—
22	1.17	1.33	1.33	0.16	0.16	—

Note. A dash indicates no change in self-efficacy and a lower mean indicates a higher self-efficacy.

For questions 1-10, the internal consistency coefficients ranged from .812 to .924 for the four assessment points. Questions 11-22 had internal consistency coefficients ranging from .817 to .958 for the three assessment points. Nunnally (1978) states that α level should be .70 or higher in the early stages of research and basic research tools should be in the area of .80. The levels for this instrument are therefore acceptable.

Findings Related to Objective 4

Intern Skills and Abilities Assessment

Objective 4 was related to measuring the interns' skills and abilities development during the internship. The interns ranked their skills and abilities on a Likert type scale with a range of 1 to 5. A 1 indicated a lack in behavior while 5 represented exceptional behavior/ability. There were five categories each with five questions. The categories were initiative, teamwork, communication skills, problem solving/decision making skills, and self management. The assessment was given pre and post test.

The means for the 25 statements ranged from 3.00 to 4.33 for the pre test as shown in Table 25. The statements with the highest and lowest means comprised the self management category and were statements 4 and 5. Means by category for the pre test are initiative with means ranging from 3.17 to 3.92, teamwork 3.92 to 4.17, communication skills 3.58 to 4.08, problem solving/decision making skills 3.17 to 4.08, and self management 3.00 to 4.33.

Table 25 also shows the post test had a high mean of 4.33 for two statements and a low mean of 3.50. The high means were both in the category teamwork and were for statements 3 and 4. The low mean was in category initiative and was for statement 3.

Table 25

Interns' Pre and Post Test Assessment of Their Skills and Abilities Summary (N=12)

	Pre			Post		
Statements	μ	σ	α	μ	σ	α
Initiative			.513			.747
1. Seeks opportunities to learn	3.58	0.49		3.92	0.28	
2. Has initiative to do a job w/o being told	3.50	0.76		3.92	0.49	
3. Acts decisively on critical issues	3.17	0.69		3.50	0.87	
4. Completes work despite obstacles/problems	3.92	0.76		4.08	0.64	
5. Sets and communicates goals then follows up	3.50	0.65		3.83	0.69	
Teamwork			.893			.845
1. Has positive impact with rapport & credibility	3.92	0.86		4.00	0.91	
2. Shares information/resources with others	4.17	0.80		4.08	0.76	
3. Assists/cooperates with co-workers	4.17	0.69		4.33	0.75	
4. Is willing to put in extra time and effort	4.17	0.69		4.33	0.75	
5. Assumes appropriate leadership role(s)	4.00	0.91		3.92	0.76	
Communication Skills			.797			.853
1. Speak up and communicates information	3.67	0.85		4.00	0.91	
2. Listens to feedback and acts to improve.	3.75	0.72		4.17	0.69	
3. Writes clearly and concisely	3.58	0.76		3.83	0.69	
4. Demonstrates oral communication skills	3.75	0.83		4.08	0.76	
5. Asks for clarification, if needed	4.08	0.86		4.25	0.72	
Problem Solving/Decision Making Skills			.728			.919
1. Analyzes situation & takes appropriate action	3.42	0.49		3.92	0.76	
2. Offers creative solutions to problems	3.67	0.47		4.08	0.76	
3. Collects & analyzes information for action	3.17	0.69		4.00	0.71	
4. Resolves problems in adequate time period	3.33	0.75		3.75	0.72	
5. Willing to learn new & enhance existing skill	4.08	0.64		4.25	0.72	
Self Management			.742			.838
1. Produces high-quality, error free work	3.17	0.69		3.75	0.72	
2. Changes strategies if needed	3.33	0.47		3.83	0.80	
3. Uses good judgment/establishes priorities	3.83	0.69		3.92	0.64	
4. Makes efficient use of time	3.00	0.71		3.75	0.60	
5. Demonstrates/practices ethical behavior	4.33	0.62		4.25	0.72	

Breakdown of means by category are initiative had means ranging from 3.50 to 4.08, teamwork 3.92 to 4.33, communication skills 3.83 to 4.25, problem solving/decision making skills 3.75 to 4.25, and self management 3.75 to 4.25.

The intern assessment instrument showed changes in the interns' perception of their skills and abilities. Three statements had a decrease in mean, two by 0.08 and one by 0.09, from pre to post test. Two of these were statements 2 and 5 in the teamwork category and the other statement 5 in the self-management category. The highest increase in mean was 0.83 and was statement 3 in the problem solving/decision making skills category. The lowest mean increase was 0.08 for statement 1 in the teamwork category. The remaining 22 statements increased in mean by 0.16 to 0.75. All means fell into the categories of adequate/average, above average, and exceptional.

The category initiative had an internal consistency coefficient of .747 for the post test. The remaining categories and their internal consistency coefficient for the post test were teamwork .845, communication skills .853, problem solving/decision making skills .919, and self management .838. Nunnally (1978) stated that α level should be .70 or higher in the early stages of research and basic research tools should be in the area of .80. The levels for this instrument are in an acceptable range.

Qualitative data for the skills and abilities portion was categorized as communication. There were numerous comments in the journals regarding different forms of communication experienced, both good and bad. The lack of communication among the adults and interns caused problems during the internship experience. These problems helped the interns realize the impact and results of poor communication. Examples of this are when Intern 1 stated "For the most part, I am set back here at my

desk and given computer work with little guidance." While at camp the intern wrote "There should have been more communication between the adults through out camp. We had no formal meeting to discuss anything." Intern 7 discussed an experience at camp involving communication between the intern and educator. She wrote "We have no criteria that has been given to us. We were simply told to train them [counselors]. During registration an educator comes in and tells the kids to do something else than what we had already told them to do. We were very frustrated." The interns who experienced poor communication vowed to improve their own communication so others would not be put in the same situation.

Interns felt there was a good line of communication due to weekly office meetings. These meeting made the interns feel like part of the office and allowed everyone to know what was taking place during the week. Interns 3, 6, 8, and 11 discussed the weekly meetings their offices held. Intern 3 said "We had [an] office conference; this is nice because we know what everyone is doing that week." Intern 8 discussed weekly meetings "[I] discussed what I had accomplished last week, this weeks plan, and what I am preparing for next week. Office conferences are a great thing… They are invaluable from a leader's perspective. In my opinion they need to be more structured and formal in order to get through the information and get on with the day but, the idea is good." These meetings set a good example for the interns to follow in the future, whether in Cooperative Extension or another field.

Communication with the educators was discussed in the journals also. By developing relationships with their mentors, the interns felt comfortable asking questions and assisting with programs. Developing a line of communication with the educators and

office workers made the interns feel like part of the office and a member of the Cooperative Extension family. Intern 2 wrote "I really enjoy spending more time with the educators. I'm really enjoying people in the office. They are fun to work with and are so willing to answer the many questions I pose to them." This intern discussing working with the Ag educator specifically as "I'm also enjoying the time that I can speak with the Ag educator and learn from his years of experience about how he deals with people."

Mentor Assessment of Interns' Skills and Abilities

The mentors were asked to evaluate their intern's abilities and skills pre and post internship using a Likert type scale. The scale ranged from one to five with five having exceptional behavior and one lacks this behavior. The mentor's instrument was nearly identical to the intern's instrument. The mentor's pre test had means ranging from 3.50 to 4.44 as shown in Table 26. The lowest mean of 3.50 was for statement 3 in the initiative category. The highest mean of 4.44 was for statement 3 in the teamwork category. Breakdown of means by category were initiative ranged from 3.50 to 4.11, teamwork 4.00 to 4.44, communication skills 3.83 to 4.22, problem solving/decision making skills 3.61 to 4.06, and self management 3.72 to 4.33.

Table 26 also has post test skills and abilities assessments by the mentors of their intern with means ranging from 4.11 to 4.78. The lowest mean was for two statements, statement 3 in the initiative category and statement 4 in the problem solving/decision making skills category. The highest mean was for statement 5 in the self management category. Means by category are initiative with means ranging from 4.11 to 4.50, teamwork 4.50 to 4.67, communication skills 4.33 to 4.67, problem solving/decision making skills 4.11 to 4.44, and self management 4.17 to 4.78.

Table 26

Mentors' Pre and Post Test Assessment of Intern's Skills and Abilities Summary (N=18)

	Pre			Post		
Statements	μ	σ	*α*	μ	σ	*α*
Initiative			.869			.931
1. Seeks opportunities to learn	4.11	0.81		4.28	0.87	
2. Has initiative to do a job w/o being told	3.94	0.85		4.50	0.69	
3. Acts decisively on critical issues	3.50	0.76		4.11	0.81	
4. Completes work despite obstacles/problems	3.89	0.66		4.22	1.08	
5. Set and communicates goals then follows up	3.67	0.75		4.28	0.99	
Teamwork			.964			.956
1. Has positive impact with rapport & credibility	4.22	0.85		4.56	0.60	
2. Shares information/resources with others	4.00	1.00		4.61	0.59	
3. Assists/cooperates with co-workers	4.44	0.68		4.61	0.68	
4. Is willing to put in extra time and effort	4.33	0.88		4.67	0.67	
5. Assumes appropriate leadership role(s)	4.06	0.85		4.50	0.60	
Communication Skills			.890			.903
1. Speaks up and communicates information	4.00	0.82		4.33	0.75	
2. Listens to feedback and acts to improve.	4.11	0.87		4.39	0.68	
3. Writes clearly and concisely	3.83	0.83		4.39	0.76	
4. Shows required oral communication skills	4.11	0.87		4.67	0.58	
5. Asks for clarification, if needed	4.22	0.79		4.33	0.82	
Problem Solving/Decision Making Skills			.923			.963
1. Analyzes situation and takes appropriate action	3.78	0.71		4.22	0.85	
2. Offers creative solutions to problems	3.89	0.81		4.28	0.87	
3. Collects & analyzes information for action	3.83	0.90		4.17	0.76	
4. Resolves problems in adequate time period	3.61	0.76		4.11	0.87	
5. Willing to learn new and enhance existing skill	4.06	0.78		4.44	0.68	
Self Management			.918			.885
1. Produces high-quality, error free work	3.89	0.74		4.28	0.73	
2. Changes strategies if needed	3.72	0.80		4.17	0.90	
3. Uses good judgment/establishes priorities	3.83	0.96		4.44	0.68	
4. Makes efficient use of time	3.94	0.70		4.17	0.96	
5. Demonstrates/practices ethical behavior	4.33	0.82		4.78	0.42	

The mean for all 25 questions increased from pre internship to post internship. The greatest increase in mean was by 0.61 for four statements. These were statements 3 and 5 in the initiative category, statement 2 in teamwork, and statement 3 in self management. The smallest increase in mean was 0.11 for statement 5 in the communication skills category. The remaining 20 statements changed by 0.17 to 0.56. All means fell into the above average and exceptional categories.

The category initiative had an internal consistency coefficient of .931 for the post test. The remaining categories and their internal consistency coefficient for the post test were teamwork .956, communication skills .903, problem solving/decision making skills .963, and self management .885. The levels for this instrument are acceptable (Nunnally, 1978).

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

This chapter includes a summary of the purpose, objectives, and findings. Conclusions, recommendations, implications, and discussion are based upon the findings of the research study.

Purpose of the Study and Research Objectives

The purpose of the study was to establish baseline data for the Oklahoma Cooperative Extension Service internship program. This study was directed by the following research objectives:

1. Describe the demographic characteristics of the interns and mentors.
2. Describe the interns' and mentors' attitudes toward the Cooperative Extension Service.
3. Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy.
4. Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities throughout the internship.

Summary of Findings

Objective 1: Describe the demographic characteristics of the interns and mentors

The interns consisted of nine female (75%) and three male (25%) college students. They all had completed at least 60 undergraduate credit hours. Eight academic departments were represented with the Agricultural Education, Communication, and Leadership department consisting of 42% of the population. Approximately 42% of the population reported previous interactions with the Cooperative Extension Service. The reported experience with Cooperative Extension Service was through the 4-H youth development program.

There were 18 mentors who participated in the study, 11 males (61%) and 7 females (39%). The majority hold a master's degree (72%). The average age was 45 years old and the average time served as an Extension Educator was 14 years. The majority (72%) have 4-H as part of their staffing assignment. In terms of mentoring, 83% reported having mentored before yet only 28% had formal mentoring training.

Objective 2: Describe the interns' and mentors' attitudes toward the Cooperative Extension Service

The interns took the Attitudes toward the Cooperative Extension Service instrument three times. The pre test had five words pairs that favored traditional services. The post test had seven word pairs that favored traditional services. The post-post had eight word pairs that favored traditional services.

There were eight contemporary word pairs favored on the pre test. The post test had seven word pairs on the contemporary side. The post-post test had six word pairs

favoring contemporary services. One word pair was neutral on the pre test and it was controlled/autonomous.

There were five word pairs that fell into the traditional category throughout the internship and five word pairs that were in the contemporary category throughout. Three words pairs went from contemporary to traditional while one word pair was neutral and went to contemporary.

Large changes from contemporary to traditional occurred from pre to post test for the word pair simple/complex. It changed by 0.83. A similar changed occurred for two word pairs from pre to post-post test. These were generalization/specialization which changed by 0.83 and neutrality/advocacy with a change of 0.84. From post to post-post test, the word pair neutrality/advocacy had a change of 0.84.

The mentors received the attitude instrument twice. The pre test had seven words that favored traditional services. On the post test, six word pairs were favored traditional. In terms of contemporary services, the pre test had seven word pairs. The post test had six word pairs favoring contemporary services. The post test had two word pairs that were deemed neutral with a mean of 4.00. They were rigid/flexible and cautious/challenging.

Two word pairs switched sides. Controlled/autonomous went from contemporary to traditional while generalization/specialization went from traditional to contemporary. Two word pairs went neutral from pre to post test, one was contemporary and one was traditional. The largest change in means for the mentors was for the word pair grassroots initiatives/top-down initiatives. It had a change of 0.62, but remained in the traditional category with means of 2.94 and 3.56. The word pair of minimizing risk/taking risk also increased in mean by 0.61, but stayed within the traditional category.

A comparison of the interns' post-post test and mentors' post test means on the instrument is given in Table 27. Figures 6 is a graphical representation of the interns' attitude means at the three assessment points while Figure 7 shows the mentors' attitude means at two assessment points.

Table 27

Intern and Mentor Attitude Instrument Means Comparison

		Intern Post–Post Test μ	Mentor Post Test μ
Rural	Urban	2.50	3.17
Education	Facilitation	3.00	2.78
Neutrality	Advocacy	3.33	3.22
Generalization	Specialization	3.42	4.22
Brainstorming	Structured analysis	3.50	4.28
*Minimizing risk	*Taking Risk	3.83	3.00
Simple	Complex	3.83	4.89
Grassroots Initiatives	Top-Down Initiatives	3.92	3.56
*Low Tech	*High Tech	4.08	4.17
*Cautious	*Challenging	4.17	4.00
*Preserves the past	*Initiates change	4.58	4.22
*Controlled	*Autonomous	4.67	3.72
Isolation	Collaboration	4.92	5.11
*Rigid	*Flexible	5.33	4.00

Note. An asterisk (*) denotes word pair that was reversed on the instrument.

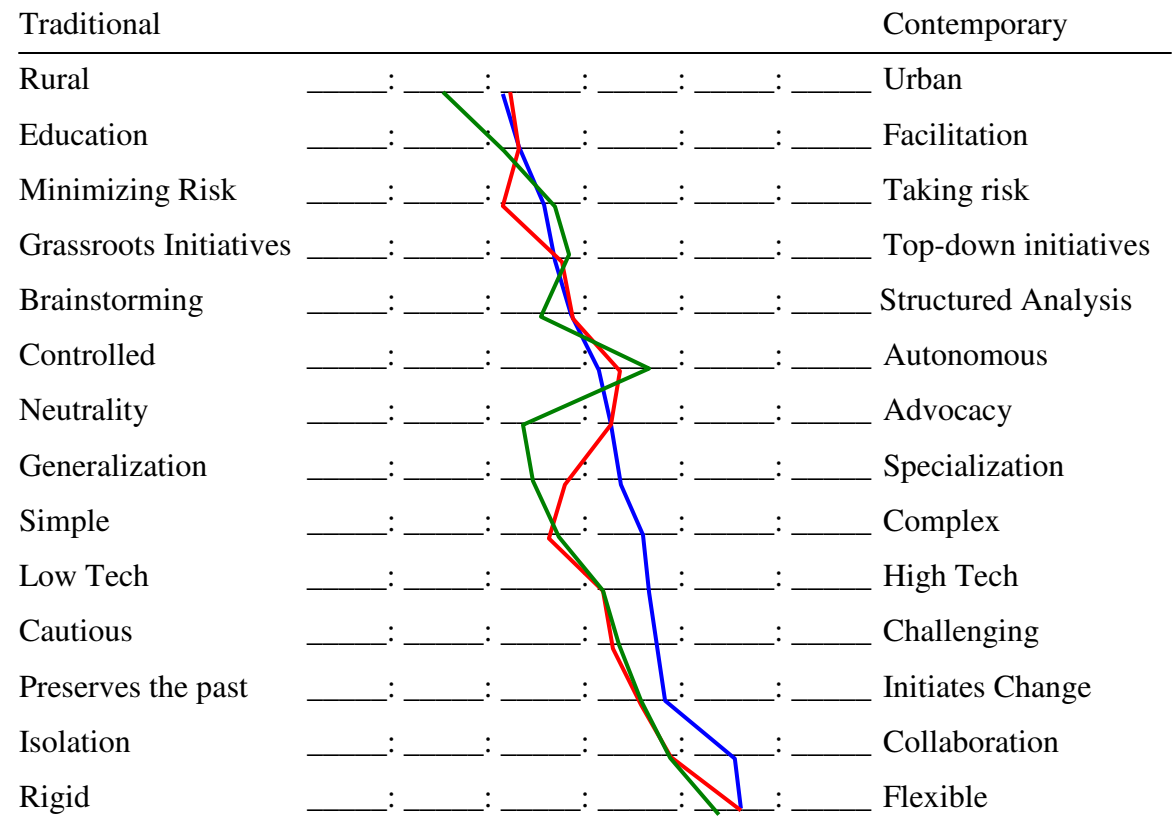


Figure 6. Intern attitudes toward Cooperative Extension Service at three assessment points.

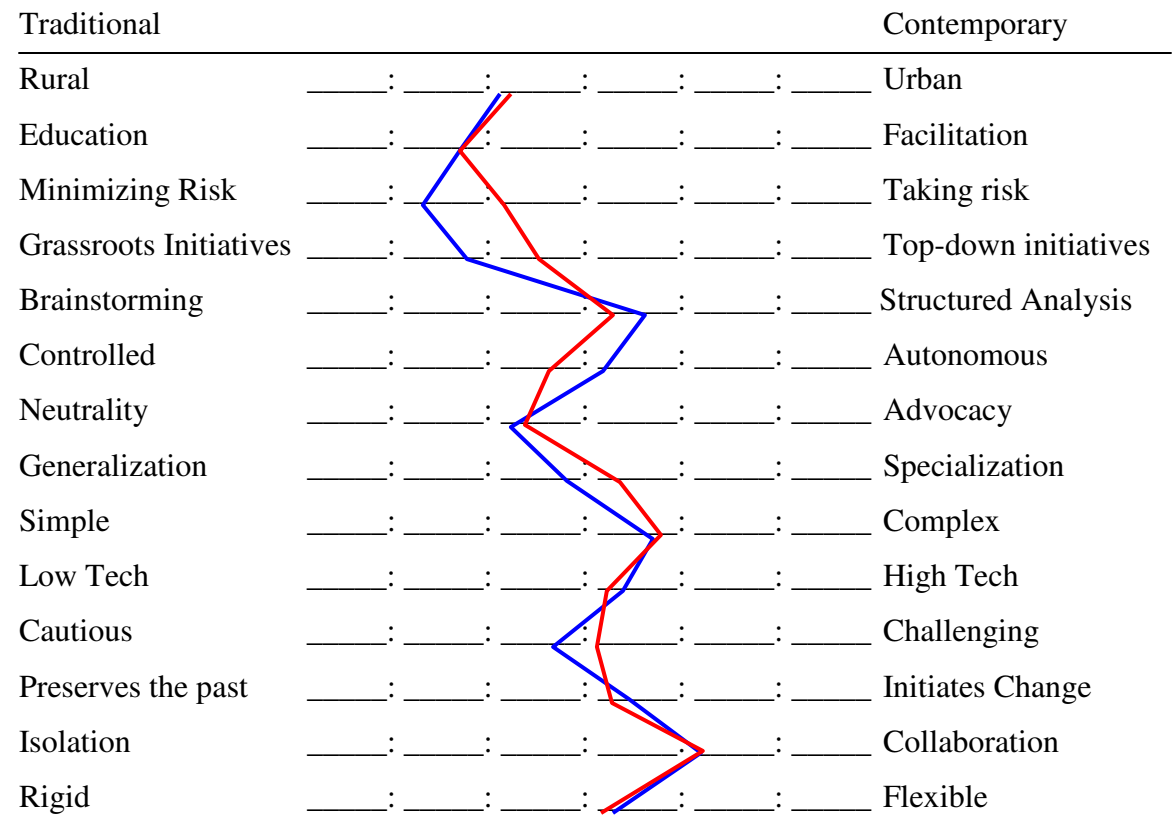


Figure 7. Mentor attitudes toward Cooperative Extension Service at two assessment points.

Objective 3: Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy

The interns' general self-efficacy increased throughout the internship. The mean raw scores for the general self-efficacy portion of the instrument was 21.08 for the pre test, 18.92 for the mid test, 18.58 for the post test, and 17.58 for the post-post test. A lower score indicates a higher self-efficacy on a scale of 10 to 60. For the expertise portion of the self-efficacy instrument, the interns had a mid-test mean of 23.08, post test

mean of 20.67, and a post-post test mean of 20.67. These questions were on a 12 to 72 scale with lower scores indicating a high self-efficacy.

The statement means for the self-efficacy test administrations typically decreased. Questions 1-10 had post-post test means less than 2.00 except for statement 2 which had a mean of 2.50. For questions 11-22, statements 16 and 18 had means of 2.00 and 2.08. The remaining statements means were below 2.00 on the post-post test.

Objective 4: Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities throughout the internship

The interns' assessment of their skills and abilities increased from pre to post test for 22 statements while three statements decreased in mean. The increases in mean ranged from 0.08 to 0.83 while the decreases in mean were by 0.08 and 0.09. Decreases in mean were statements in the teamwork and self management categories. The pre test means ranged from 3.00 to 4.33 and post test means ranged from 3.50 to 4.33.

The mentors perceived the interns' skills and abilities to improve for all 25 statements from pre to post test. This was shown by the increase in mean for all statements. The pre test means ranged from 3.50 to 4.44 while post test means ranged from 4.11 to 4.78. The greatest increase in mean was by 0.61 for three statements, one in the teamwork category and two in the initiative category, and the smallest increase was 0.11 in the communication skills category.

Conclusions

Conclusions related to Objective 1

The interns represented a broad, diverse spectrum of students. Interns represented eight different academic departments on campus and were upperclassmen and graduate students, many nearing the completion of their education. The population was mainly female. The College of Agricultural Sciences and Natural Resources was the most represented college. All previous interaction with Cooperative Extension was with the 4-H youth development program.

The mentors who participated in the internship program were experienced educators with Cooperative Extension Service and experienced mentors. They represented a diverse array of staffing assignments and were highly educated with the majority possessing a degree above a bachelor's.

Conclusions related to Objective 2

At the beginning of the internship, the interns viewed the Cooperative Extension Service as having more contemporary services than traditional services. At the end of the internship, the interns' perception was equally divided among the traditional and contemporary services. However, the post-post test revealed that the interns continued to shift to a more traditional services view than contemporary. Prior to the beginning of the internship, many of the interns did not have any previous experience with Cooperative Extension Service. The internship experience had an effect on the interns' perception of the Cooperative Extension Service which is shown by the changes in mean. The mentors

viewed Cooperative Extension as more traditional which may have affected the interns' perceptions, causing the shift to a more traditional services view.

The mentors had a balanced view of the Cooperative Extension Service, being equally divided among traditional and contemporary services for both the pre and post test. There was a shift from not as strongly traditional services from pre to post test. The shift towards being more neutral may be attributed to the experience as mentor and working with an intern. The interns viewed the Cooperative Extension as more contemporary, causing the mentors' to move to a more neutral outlook.

Table 27 compares the post-post test attitude means of the interns with the post test attitude means of the mentors. There were similarities for both the interns and mentors attitude means with Gruntmeir's (1999) findings with experienced Extension Educators using the same instrument. The interns and mentors categorized eight word pairs similarly. This can be attributed to the interns being influenced or adapting the mentors' attitude and vice versa. There were however a few major differences for the word pairs of rigid/flexible, simple/complex, and controlled/autonomous. This can be attributed to the interns' lack of experience working in Cooperative Extension in comparison to the mentors experience with the Cooperative Extension Service.

The move in attitude toward traditional services (interns) and contemporary services (mentors) should not be viewed in terms of good or bad. Instead the change the internship experience may have caused should be embraced. The learning, experiences, and growth occurred during the internship supports the six ideas experiential learning is built upon.

Conclusions for Objective 3

Overall, the interns became more efficacious as they experienced the duties and roles of Extension educators during their internship. This change can be attributed to vicarious experiences during the internship (Bandura, 1997). The interns' post-post test self-efficacy was comparable to Gruntmeir's (1999) findings with experienced Extension Educators. In Gruntmeir's study, she found experienced Extension educators had a general self-efficacy mean score of 20.40. The interns in this study had a general self-efficacy mean score for the post-post test of 17.58. The interns therefore had a higher self-efficacy in terms of general self-efficacy than the experienced Educators in Gruntmeir's study.

The expertise portion of the self-efficacy instrument (questions 11-22) raw score mean for Gruntmeir's study was 17.84. The interns' raw score mean for the post-post test was 20.67. The experienced Extension educators in Gruntmeir's study had higher self-efficacy than the interns when it came to questions relating specifically to an Extension Educator's job. This would be expected as the interns lack the experience and tenure as an Educator.

The majority of the interns' (75% of population) general self-efficacy increased from pre to mid test. Only 8% had a decrease in self efficacy from pre to mid test, while 17% maintained the same score pre to mid test. From mid to post test 50% had an increase in their self-efficacy while 42% had a decrease in their self-efficacy. The remaining 8% maintained the same score. Post to post-post test, 50% of the population had an increase in self-efficacy while 50% decreased in self-efficacy. Therefore, from the first self-efficacy (pre test) to the last self-efficacy measurement (post-post test), 83% of

the interns increased in self-efficacy while 8% decreased. The remaining 8% of the population had the same self-efficacy score.

The expertise self-efficacy increased in 42% of the population and decreased in 42% of the population from mid to post test. The same expertise self-efficacy score was maintained by 17% of the population. When looking at the mid to post-post test scores, self-efficacy decreased in 58% of the population and increased in 42% of the population. Post to post-post test had 50% increase in self-efficacy and 33% of the population decrease. The remaining 17% maintained the same scores.

The trends for the self-efficacy are promising. In terms of general self-efficacy, the interns started with a mean raw score of 21.08 and it decreased (improved) throughout the next three administrations of the instrument. The lower the mean, the higher the self-efficacy meaning, overall, the interns felt better about themselves the longer they were in the internship. The internship therefore had a positive impact on their self-efficacy. When looking at the expertise portion of the self-efficacy instrument, the interns started at a mean of 23.08. The next measurement decreased to 20.67 and it remained constant at this level at the post-post test. During the internship, the interns' self-efficacy improved in items related specifically to an educator's job. It is encouraging the interns remained constant on this score and did not drop in self-efficacy. The interns did retain knowledge, increased self-efficacy, and still felt good about their abilities as an Educator five months after completing the internship.

The qualitative data collected from the journals supports the conclusion that the interns self-efficacy increased. The data ties into the theoretical framework of Kolb's model of experiential learning. Intern 2 wrote "I feel really good that I was able to

identify a weed for our Ag agent. It was exciting to realize that I have areas that are a little stronger than his even though he has a lot more experience." This journal entry touches on the following ideas experiential learning is based on: Learning is best conceived as a process, learning should be relearning, learning involves the whole person, and learning is a process of combining new experiences with old experiences. The interns were involved in new experiences (CE), they reflected upon these experiences (RO), they made decisions and solved problems (AC), and tested their decisions (AE). This cycle occurred many times over the course of the internship.

Conclusions for Objective 4

Overall the interns believed they improved their skills and abilities from pre to post internship. The internship helped them to develop their skills and abilities while also gaining real world experience. The mentors agreed with the interns and felt the interns improved their skills and abilities over the course of the internship. Using this assessment, the internship experience did have a positive impact on the interns. They learned about being an Extension Educator while developing the necessary skills and abilities to succeed.

The mentors rated the interns higher on the pre and post test than the interns rated them selves. The interns may not have been as confident in their skills and abilities causing them to rate their self lower while the mentors felt their skills and abilities were better than average.

The five skill categories, on average, increased in mean. From pre to post test, two statements in the teamwork category decreased in mean. However, this category still had

the largest mean both pre and post test, but had a small increase in mean. The largest improvement (increase in mean) occurred in the problem solving category. The categories of self management, initiative, and communication skills had increases. The interns' basic skill set when they began the internship was built upon improving their overall skill set.

The qualitative data from the weekly journals supported the interns and mentors perception that their skills and abilities improved over the course of the internship. Intern 10 wrote "I really learned to apply myself as a leader even though I wasn't one hundred percent sure of my surroundings." She also said "I think they [educators] are amazing people to be able to handle so much!" The realization of the hard work and planning that goes into a successful Cooperative Extension program caused this intern to develop respect for the people she worked with. She also realized her own strengths and plans to pursue a career in Cooperative Extension.

Implications of the Study

The outcomes and success of a program cannot be determined without solid evaluation methods and instruments. Discussion with other states with internship programs did not yield a set evaluation method. By testing instruments, a standard evaluation method for Cooperative Extension Service internships can be developed, providing the potential for uniformity. This would allow the comparison of data from state to state. The goal is to answer the question what effect does Cooperative Extension Service internships have on students considering becoming an Extension Educator? Are students with internship experience more likely to become educators?

Recommendations

A recommendation is to replicate this study using the attitude and self-efficacy instruments with future Oklahoma Cooperative Extension Service interns. This would allow the collection of longitudinal data of interns with Oklahoma Cooperative Extension Service. It should also be replicated with other state's internship programs as to measure return on investment.

The students who were not selected as interns should be compared to those students who were selected to determine if they are similar candidates.

The Oklahoma Cooperative Extension Service internship program should be continued as funding allows. The findings show it was a positive experience, but the long terms effects are unknown. Further research needs to be conducted on evaluation methods of internships specific to the Cooperative Extension Service. The attitude and self-efficacy instruments have the potential to be used as evaluation tools, but other instruments, specifically skill and ability development should be developed and tested.

Mentor training for mentors specific to Cooperative Extension Service should be completed before an intern begins. The development of a manual should be based upon the research of internships with Cooperative Extension. In addition, the self-efficacy instrument should be administered to the mentors in addition to the attitudes instrument. This would allow the comparison on intern and mentor self-efficacy.

Instead of collecting qualitative data relying solely on journal entries, focus group data from interns and mentors should be collected. This would allow an in depth discussion of the experiences throughout the internship. The suggestions and

improvements provided could be expanded upon in this setting and used to develop a mentoring best practices manual.

Recommendations for Further Research

A recommendation for further research is to have a follow up study with these interns to determine if the internship had an impact on their career decisions and their feelings about the Cooperative Extension Service. The number of interns who interviewed for positions with Cooperative Extension and became employed would be known. The interns who enter Cooperative Extension and their persistence can be tracked.

Discussion of Study

The following are thoughts gathered throughout the study that do not align with the objectives but were brought forth by the interns through their journal entries. Interns should not be viewed as another "secretary" or cleaning person. Work assigned to interns should not be work the mentor did not want to do. Mentors should be encouraging, willing to try interns' new ideas out. Mentors should step out of their comfort and safety zone. Interns should not be shared among counties because it causes undo stress upon the interns.

REFERENCES

Bandura, A. (1994). Self-Efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: W.H. Freeman and Company.

Beard, D. F. (2007). Assessment of internship experiences and accounting core competencies. *Accounting Education, 16*(2), 207-220.

Beard, F., & Morton, L. (1999). Effects of internship predictors on successful field experiences. *Journalism and Mass Communication Educator, 53*(4), 42-53.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education.* New York: National Bureau of Economic Research.

Cannon, J. A., & Arnold, M. J. (1998). Student expectations of collegiate internship program in business: A 10-year update. *Journal of Education for Business, 73*(4), 202-205.

Clark, S. C. (2003). Enhancing the educational value of business internships. *Journal of Management Education, 27*(4), 472-484.

Cooper, A. W., & Graham, D. L. (2001). Competencies needed to be successful county agents and county supervisors [Electronic Version]. *Journal of Extension*, *39*(1). Retrieved January 10, 2007 from http://www.joe.org/joe/2001february/rb3.html.

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Department of Agricultural Sciences and Natural Resources. (2006). Extension Educator Duties. Retrieved March 4, 2008, from http://hr.dasnr.okstate.edu/OCES-careers/extension-educator-duties

Diambra, J. F., Cole-Zakrzewski, K. G., & Booher, J. (2004). A comparison of internship stage models: Evidence from intern experiences. *Journal of Experiential Education, 27*(2), 191-212.

Gault, J., Redington, J., & Schlager, T. (2000). Undergraduate business internships and career success: Are they related? *Journal of Marketing Education, 22*(1), 45-53.

Grogan, S., & Eshelman, B. (1998). Staffing strategies for a more diverse workforce: Case examples in Cornell Cooperative Extension [Electronic Version]. *Journal of Extension*, *36*(1). Retrieved March 4, 2008 from: http://www.joe.org/joe/1998february/a1.html.

Gruntmeir, L. G. (1999). *The relationship among Oklahoma Extension educators' attitudes toward the Extension service, problem solving strategies and their self-efficacy beliefs.* Unpublished doctoral dissertation, Oklahoma State University, Stillwater.

Henry, J. S., Rehwaldt, S. S., & Vineyard, G. M. (2001). Congruency between student interns and worksite supervisors regarding critical elements of an internship experience. *Information Technology, Learning, and Performance, 19*(1), 31-41.

Inkster, R. P., & Ross, R. G. (1995). *The Internship as Partnership: A Handbook for Campus-Based Coordinators and Advisors*. Raleigh, NC: National Society for Experiential Education.

Inkster, R. P., & Ross, R. G. (1998). *The Internship as Partnership: A Handbook for Businesses, Nonprofits, and Government Agencies*. Needham Heights, ME: Simon & Schuster.

Jones, E. (2006). Internships: Previewing a profession. *Occupational Outlook Quarterly*, *50*(2), 16-18.

Jones, L., Wu, C. H., & Hargrove, T. (2002). *Internships as applied academic experiences.* Paper presented at the Association for International Agricultural and Extension Education, Durban, South Africa.

Kerka, S. (1989). Cooperative education: Characteristics and Effectiveness. *ERIC Digest 91*. (ERIC Document Reproduction Service No. ED312455).

Knouse, S. B., Tanner, J. R., & Harris, E. W. (1999). The relation of college internships, college performance, and subsequent job opportunity. *Journal of Employment Counseling, 36*(1), 35-43.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education, 4*(2), 1932-1212.

Kolb, D. A. (1984). *Experiential Learning*. Englewood Cliffs, NJ: Prentice-Hall Inc.

McCaffery, J. L. (1979). Perceptions of satisfaction - dissatisfaction in the internship experience. *Public Administration Review, 39*(3), 241-244.

Moseley, B. E., & Balschweid, M. A. (2003). *Developing fundamental skills and knowledge in preservice Extension educators: An internship approach.* Paper presented at the National Agricultural Education Research Conference, Orlando, FL.

Neapolitan, J. (1992). The internship experience and clarification of career choice. *Teaching Sociology, 20*(3), 222-231.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill Inc.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1965). *The measurement of meaning*. Urbana, IL: Univeristy of Illinois Press.

Parilla, P. F., & Hesser, G. W. (1998). Internships and the sociological perspective: Applying principles of experiential learning. *Teaching Sociology, 26*(4), 310-329.

Patterson, V. (1997). The employer's guide: Successful intern/co-op programs. *Journal of Career Planning and Employment, 57*(2), 30-34, 55-56, 59.

Purdue University. (2008). Purdue Extension Summer Intern Program. Retrieved March 4, 2008, from http://sharepoint.agriculture.purdue.edu/agriculture/FNR/List?Job%20Postings/DispForm.aspx?ID=541

Roberts, W. L. (1997). *An investigation of the relationship between principals' self-efficacy beliefs and their methods of managing conflict with teachers*. Unpublished doctoral dissertation, Auburn University.

Robinson, J. S., Garton, B. L., & Vaughn, P. R. (2007) Becoming employable: A look at graduates' and supervisors' perceptions of the skills needed for employability. *North American Colleges and Teachers of Agriculture Journal, 51*(2), 19-26.

Ross, L. E., & Elechi, O. O. (2002). Student attitudes towards internship experiences: From theory to practice. *Journal of Criminal Justice Education, 13*(2), 297-312.

Scholz, U., Dona, B. G., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? *European Journal of Psychological Assessment, 18*(3), 242-251.

Scott, M. E. (1992). Internships add value to college recruitment. *Personnel Journal, 71*(4), 59-63.

Seevers, B. S., Graham, D., Gamon, J., & Conklin, N. (1997). *Education through Cooperative Extension*. Albany, NY: Delmar Publishers.

Seevers, B. S., Treat, K., Cummings, M., & Wright, S. (1996). Building bridges: Leadership development for the 21st century. [Electronic Version]. *Journal of Extension, 31*(4). Retrieved January 26, 2007 from http://www.joe.org/joe/1996august/a3.html

Smith, M. K. (2001). David A. Kolb on experiential learning [Electronic Version]. *The Encyclopedia of Informal Education*. Retrieved April, 17, 2007 from http://www.infed.org/biblio/b-explrn.htm.

Stanton, M. (1992). Internship: Learning by doing. *Occupational Outlook Quarterly, 36*(2), 30-33.

Stedman, N. P., Rutherford, T. A., & Roberts, T. G. (2006). *The role of critiqued reflection in improving the perceived leadership competencies of undergraduates during a ten week professional internship.* Paper presented at the American Association for Agricultural Education, Charlotte, North Carolina.

Stone, W. E., & McLaren, J. (1999). Assessing the undergraduate intern experience. *Journal of Criminal Justice Education, 10*(1), 171-183.

Tanyel, F., Mitchell, M. A., & McAlum, H. G. (1999). The skill set for success of new business school graduates: Do prospective employers and university faculty agree? *Journal of Education for Business, 75*(1), 33-37.

Taylor, M. S. (1988). Effects of college internships on individual participants. *Journal of Applied Psychology, 73*(3), 393-401.

University of Florida. (2008). Extension internship program. Retrieved February 9, 2008, from http://extadmin.ifas.ufl.edu/internship_program.shtml

Watson, B. S. (1995). The intern turnaround. *Management Review, June*, 9-12.

Zanville, H., & Markwood, R. (1982). *A Casebook on Practice in Internship Education*. Boulder, CO: Western Interstate Commission for Higher Education.

APPENDIX A

IRB APPROVAL

Oklahoma State University Institutional Review Board

Date:	Tuesday, May 01, 2007
IRB Application No	AG0719
Proposal Title:	Internships with the Oklahoma Cooperative Extension Service: Linking Students with the Profession
Reviewed and Processed as:	Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/30/2008

Principal Investigator(s

Lesley R. Lehenbauer
205 4H Youth Development
Stillwater, OK 74078

William G. Weeks
458 Ag Hall
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Sue C. Jacobs, Chair
Institutional Review Board

APPENDIX B

INTERN COVER LETTER

AND CONSENT FORM

Date 2007
May 2, 2007

Intern Informed Consent Form

Internships with the Oklahoma Cooperative Extension Service: Linking students with the profession

Dear Intern Participant:

Hello, my name is Lesley Lehenbauer and I am a graduate student at Oklahoma State University. I am conducting a research study involving the inaugural year of the Oklahoma Cooperative Extension Service internship program. The study is titled "**Internships with the Oklahoma Cooperative Extension Service: Linking students with the profession**" and is about the effects the internship experience has on collegiate student interns. Benefits associated with this study include improving the internship program and experience offered through the Cooperative Extension Service.

I am asking you to participant in this study because you have been selected as an intern for the 2007 Oklahoma Cooperative Extension Service internship program. If you agree to participate, you will be completing a survey instrument at the beginning of the internship. You will also be asked to complete a survey instrument halfway through the internship and again after completing the internship. The survey will ask you to evaluate your self efficacy, attitude, and abilities developed from this internship experience. It will take approximately 25 minutes to complete the beginning and end surveys and 10 minutes for the midway survey. I would also like to ask you to participate in a focus group discussion concerning the internship experience after completing the internship. Your participation in the focus group is voluntary. It will last approximately 1.5 hours. In addition, you will be asked to complete a weekly journal. The journal will detail what tasks and activities you did throughout the week.

The researchers will not use your name or any other identifying information in any report or document. We will use an ID number to record your responses. The list connecting your name to the ID number will be kept in a locked file in my office. I will be the only person with access to the information that will correlate your name with your survey responses. This information will only be kept in order to track your survey responses. The information obtained from the surveys will only be available to the evaluation team. The data will be kept securely until December 31st, 2007 at which time it will be destroyed. There are no risks to you in sharing this information with us. Tape recordings from the focus group will be destroyed on December 31st, 2007.

There are no known risks or direct benefits to those who participate in this research project.

You can decide if you want to participate. You will be given the option to refuse to answer any of the questions or withdraw at any time. If you choose to withdraw from the study, you have the right to tell us not to use any information that you have given us.

You also have the right to receive a copy of the evaluation report if you so choose. Participation in this survey does not affect your participation in the internship program.

If you have any questions or need additional information, please feel free to contact me by phone at 405.744.8886. In person or by mail at 205 4-H Youth Development Building, Oklahoma State University, Stillwater, OK 74078. I can be reached by email at lesley.lehenbauer@okstate.edu.

If you have questions about your rights as a research volunteer, you may contact Dr. Sue C. Jacobs, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405.744.1676 or by email at irb@okstate.edu.

Sincerely,

Lesley Lehenbauer
Graduate Assistant
Oklahoma State University

Dr. Charles Cox
Interim Assistant Director and
State 4-H Program Leader - OCES
Oklahoma State University

OSU
Institutional Review Board
Approved 5/1/07
Expires 4/30/08
Initials
HE0719

Page 2 of 4

Cooperative Extension Service Internship Program
Intern Informed Consent Form
(To be returned to Lesley Lehenbauer)

This is to certify that I, _____, hereby consent to my voluntary participation in this study as an authorized part of the education and research program of Oklahoma State University.

I understand the information given to me. This study and my part in it have been fully explained to me by this letter. I have received answers to any questions that I had about the research/evaluation procedure. I understand and agree to the conditions of this study as described. I understand that I will receive a signed copy of this consent form.

I understand that I may decline to answer specific questions or items in the surveys.

I understand that any data or answers will be confidential.

Participation in this research study is voluntary and I can withdraw from the research activity at any time without reprisal or penalty. There are no risks if I withdraw from the research study.

Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and/or data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Signatures:
I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

_____ _____

Signature Intern Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

_____ _____

Signature of Researcher Date

Cooperative Extension Service Internship Program
Intern Informed Consent Form
(To be kept by the intern participant)

This is to certify that I, _____, hereby consent to my voluntary participation in this study as an authorized part of the education and research program of Oklahoma State University.

I understand the information given to me. This study and my part in it have been fully explained to me by this letter. I have received answers to any questions that I had about the research/evaluation procedure. I understand and agree to the conditions of this study as described. I understand that I will receive a signed copy of this consent form.

I understand that I may decline to answer specific questions or items in the surveys.

I understand that any data or answers will be confidential.

Participation in this research study is voluntary and I can withdraw from the research activity at any time without reprisal or penalty. There are no risks if I withdraw from the research study.

Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and/or data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Signatures:
I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

_____ _____

Signature Intern Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

_____ _____

Signature of Researcher Date

APPENDIX C

INTERN APPLICATION

Submit by March 1 to Charles Cox
205 4-H Youth Development
Stillwater, OK 74078

2007 Oklahoma Cooperative Extension Service
Summer Internship Program Application

A. Applicant Information

Last Name:_____ First Name: _____ Middle Initial: _____

Email:_____

Street Address:_____

City:_____ State:_____ Zip:_____

Home County and State:_____

Phone:_____ OSU CWID#: _____

Major: _____ Minor:_____

GPA:_____ Classifiction in Fall (Jr., Sr):_____ Graduation Date:_____

(Expand this form as needed for your responses to each item.)

B. Internship Objectives (Briefly describe your goals or reasons for applying for this internship and what you would like to experience &/or projects you'd like to plan/conduct in the internship).

C. Have you ever worked in a County Extension Office? □ Yes □ No If "Yes," describe when, where and scope of experiences. This may allow us to find a location that will offer different/new experiences, as well as provide another reference.

D. County Preference: List three counties where you can work/intern. Students will only be assigned to counties that have agreed to host an intern position. Or indicate "no preference"

E. Previous Work Experience: Include Employer, Position and Dates of Employment on resume

F. Academic Reference: List at least one of your college professors who we may contact for a reference.

Name: _____ Department_____

Phone: _____ E-mail: _____

G. Other information: Provide a résumé and any additional information that you believe may be helpful to your application – No more than one additional page and no more than a 2-page resume. (Some possible items for consideration could be your experience with or membership in youth organizations, working with adult &/or teen volunteers and non-profit organizations.)

H. Interviews: The OCES reserves the right to screen applications based upon the written documents and references and to conduct interviews to make final selections and placements. Interviews will be conducted on March 12 or 16 as needed. If selected for an interview what time could you be available on these dates?

I. Availability: Internships of 10-12 weeks are preferred; however, they can range from 8-12 weeks. How many weeks do you prefer? When could you begin the internship?

Finally, are there any dates that you know will conflict with your internship,--family vacation, wedding out of state, etc. (This is helpful in placements and avoiding key county dates, such as 4-H camp, etc.)

APPENDIX D

INTERN JOURNAL

ID # _____

	Cooperative Extension Service Oklahoma State University	**Internship Journal** Weekly Report of Activities

Report for the Week of:

Accomplishments – Knowledge and Skills Developed

Please describe the tasks and experiences you have during the internship experience. Also, identify the program area that each task is associated with i.e. Agriculture (1), Family and Consumer Sciences (2), 4-H Youth Development (3), Rural and Community Development (4), or Other (5) and the hours worked for each task.

Example: Today I prepared an information packet about 4-H camp for the parents [3], [4].

Day	Description	Program Area	Hours Worked
Sunday			
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			

Please return to Lesley Lehenbauer on Monday after the completion of each week. Email to **lesley.lehenbauer@okstate.edu** Thank you!

APPENDIX E

INTERN PRE TEST INSTRUMENTS

ID # _____

Attitudes toward the Cooperative Extension Service

I am interested in your attitudes toward the Cooperative Extension Service. I am interested in your opinions of the Extension Service as it is (prior to the internship experience, after the internship experience), not how you wish it to be. Please respond to the items below. Mark only one X for each word pair. Place an X on the lines provided, not the spaces in between. For example:

If you feel that the Extension Service provides solutions, place the X

Provide solutions	_X_	____	____	____	____	____	____	Provide Resources

If you feel that the Extension Service provides resources, place the X

Provide solutions	____	____	____	____	____	____	_X_	Provide Resources

Or if you feel that the Extension Service provides a combination, place the X in the space you feel is appropriate.

Provide solutions	____	____	____	_X_	____	____	____	Provide Resources

---

Oklahoma Cooperative Extension Service

Education	____	____	____	____	____	____	____	Facilitation
Generalization	____	____	____	____	____	____	____	Specialization
Initiatives change	____	____	____	____	____	____	____	Preserves the past
Taking risk	____	____	____	____	____	____	____	Minimizing risk
Simple	____	____	____	____	____	____	____	Complex
Challenging	____	____	____	____	____	____	____	Cautious
High tech	____	____	____	____	____	____	____	Low tech
Grassroots initiatives	____	____	____	____	____	____	____	Top/Down Initiatives
Brainstorming	____	____	____	____	____	____	____	Structured analysis
Neutrality	____	____	____	____	____	____	____	Advocacy
Rural	____	____	____	____	____	____	____	Urban
Flexible	____	____	____	____	____	____	____	Rigid
Autonomous	____	____	____	____	____	____	____	Controlled
Isolation	____	____	____	____	____	____	____	Collaboration

ID # _____

Extension Educator's Self – Efficacy Inventory

Read each statement and indicate the extent to which you agree or disagree with that statement using the scale provided. Mark your responses by circling the number to the right of each statement.

1 Strongly Agree	2 Moderately Agree	3 Slightly Agree	4 Slightly Disagree	5 Moderately Disagree	6 Strongly Disagree

1. I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6
2. If someone opposes me, I can find means and ways to get what I want.	1	2	3	4	5	6
3. It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5	6
4. I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5	6
6. I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5	6
8. When I am confronted with a problem, I can usually find several solutions.	1	2	3	4	5	6
9. If I am in trouble, I can usually think of something to do.	1	2	3	4	5	6
10. No matter what comes my way, I am usually able to handle it.	1	2	3	4	5	6

ID # _____

Internship Assessment by Interns

Read each of the statements below and mark what you think your behavior or ability level is for each statement using the scale below.

1	2	3	4	5
Lacks this behavior	Limited/Minimal	Adequate/Average	Above average	Exceptional

Initiative

1. Seeks opportunities to learn	1	2	3	4	5
2. Takes initiative to get a job done even if not specifically told to do so	1	2	3	4	5
3. Acts decisively on critical issues	1	2	3	4	5
4. Completes work despite obstacles/problems	1	2	3	4	5
5. Sets and communicates goals and follows up with results	1	2	3	4	5

Teamwork

1. Makes a positive impact on team by establishing rapport and credibility	1	2	3	4	5
2. Shares information/resources with others	1	2	3	4	5
3. Assists/cooperates with co-workers	1	2	3	4	5
4. Is willing to put in extra time and effort	1	2	3	4	5
5. Assumes appropriate leadership role(s)	1	2	3	4	5

Communication skills

1. Is willing to speak up and communicate information	1	2	3	4	5
2. Listens to feedback and acts to improve.	1	2	3	4	5
3. Writes clearly and concisely	1	2	3	4	5
4. Demonstrates oral communication skill required for the job	1	2	3	4	5
5. Asks for clarification, if needed	1	2	3	4	5

Problem Solving/Decision Making Skills

1. Analyzes situations and takes appropriate action	1	2	3	4	5
2. Offers creative solutions to problems	1	2	3	4	5
3. Collects and analyzes information to do a task and establishes a course of action	1	2	3	4	5
4. Resolves problems in an adequate time period	1	2	3	4	5
5. Is willing to learn new skills and enhance existing skills	1	2	3	4	5

Self Management

1. Produces high-quality, error-free work	1	2	3	4	5
2. Adopts new strategies when current approach is not effective	1	2	3	4	5
3. Uses good judgment/establishes priorities	1	2	3	4	5
4. Makes efficient use of time	1	2	3	4	5
5. Demonstrates/practices ethical behavior	1	2	3	4	5

APPENDIX F

INTERN MID TEST INSTRUMENT

ID # _____

Extension Educator's Self – Efficacy Inventory

Read each statement and indicate the extent to which you agree or disagree with that statement using the scale provided. Mark your responses by circling the number to the right of each statement.

1 Strongly Agree	2 Moderately Agree	3 Slightly Agree	4 Slightly Disagree	5 Moderately Disagree	6 Strongly Disagree

1. I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6
2. If someone opposes me, I can find means and ways to get what I want.	1	2	3	4	5	6
3. It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5	6
4. I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5	6
6. I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5	6
8. When I am confronted with a problem, I can usually find several solutions.	1	2	3	4	5	6
9. If I am in trouble, I can usually think of something to do.	1	2	3	4	5	6
10. No matter what comes my way, I am usually able to handle it.	1	2	3	4	5	6
11. I have the skills necessary to be an effective leader.	1	2	3	4	5	6
12. I have the diagnostic skills to assess the effectiveness of my programs.	1	2	3	4	5	6
13. I am able to make effective presentations to groups.	1	2	3	4	5	6
14. When a client has a concern, I am able to clarify and restate it in a helpful manner.	1	2	3	4	5	6
15. It is easy for me to write effective professional correspondence and memos.	1	2	3	4	5	6
16. When parents or community members become involved in projects, it is because I make special efforts to enlist their help.	1	2	3	4	5	6
17. I am skillful at scheduling activities involving my job.	1	2	3	4	5	6
18. When an event runs more smoothly than usual, it is because I exerted extra effort.	1	2	3	4	5	6
19. I have skills in working with groups that allow them to work effectively and efficiently.	1	2	3	4	5	6
20. If a client becomes angry or upset with me, I feel assured that I can handle those outbursts.	1	2	3	4	5	6
21. I am able to handle the unexpected events that arise during the course of the day.	1	2	3	4	5	6
22. Extension Educators make a difference when they are able to handle the tasks of their job.	1	2	3	4	5	6

APPENDIX G

INTERN POST TEST INSTRUMENTS

ID # _____

Attitudes toward the Cooperative Extension Service

I am interested in your attitudes toward the Cooperative Extension Service. I am interested in your opinions of the Extension Service as it is (prior to the internship experience, after the internship experience), not how you wish it to be. Please respond to the items below. Mark only one X for each word pair. Place an X on the lines provided, not the spaces in between. For example:

If you feel that the Extension Service provides solutions, place the X

Provide solutions	_X_	____	____	____	____	____	____	Provide Resources

If you feel that the Extension Service provides resources, place the X

Provide solutions	____	____	____	____	____	____	_X_	Provide Resources

Or if you feel that the Extension Service provides a combination, place the X in the space you feel is appropriate.

Provide solutions	____	____	____	_X_	____	____	____	Provide Resources

---

Oklahoma Cooperative Extension Service

Education	____	____	____	____	____	____	____	Facilitation
Generalization	____	____	____	____	____	____	____	Specialization
Initiatives change	____	____	____	____	____	____	____	Preserves the past
Taking risk	____	____	____	____	____	____	____	Minimizing risk
Simple	____	____	____	____	____	____	____	Complex
Challenging	____	____	____	____	____	____	____	Cautious
High tech	____	____	____	____	____	____	____	Low tech
Grassroots initiatives	____	____	____	____	____	____	____	Top/Down Initiatives
Brainstorming	____	____	____	____	____	____	____	Structured analysis
Neutrality	____	____	____	____	____	____	____	Advocacy
Rural	____	____	____	____	____	____	____	Urban
Flexible	____	____	____	____	____	____	____	Rigid
Autonomous	____	____	____	____	____	____	____	Controlled
Isolation	____	____	____	____	____	____	____	Collaboration

ID # _____

Extension Educator's Self – Efficacy Inventory

Read each statement and indicate the extent to which you agree or disagree with that statement using the scale provided. Mark your responses by circling the number to the right of each statement.

1 Strongly Agree	2 Moderately Agree	3 Slightly Agree	4 Slightly Disagree	5 Moderately Disagree	6 Strongly Disagree

1. I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6
2. If someone opposes me, I can find means and ways to get what I want.	1	2	3	4	5	6
3. It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5	6
4. I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5	6
6. I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5	6
8. When I am confronted with a problem, I can usually find several solutions.	1	2	3	4	5	6
9. If I am in trouble, I can usually think of something to do.	1	2	3	4	5	6
10. No matter what comes my way, I am usually able to handle it.	1	2	3	4	5	6
11. I have the skills necessary to be an effective leader.	1	2	3	4	5	6
12. I have the diagnostic skills to assess the effectiveness of my programs.	1	2	3	4	5	6
13. I am able to make effective presentations to groups.	1	2	3	4	5	6
14. When a client has a concern, I am able to clarify and restate it in a helpful manner.	1	2	3	4	5	6
15. It is easy for me to write effective professional correspondence and memos.	1	2	3	4	5	6
16. When parents or community members become involved in projects, it is because I make special efforts to enlist their help.	1	2	3	4	5	6
17. I am skillful at scheduling activities involving my job.	1	2	3	4	5	6
18. When an event runs more smoothly than usual, it is because I exerted extra effort.	1	2	3	4	5	6
19. I have skills in working with groups that allow them to work effectively and efficiently.	1	2	3	4	5	6
20. If a client becomes angry or upset with me, I feel assured that I can handle those outbursts.	1	2	3	4	5	6
21. I am able to handle the unexpected events that arise during the course of the day.	1	2	3	4	5	6
22. Extension Educators make a difference when they are able to handle the tasks of their job.	1	2	3	4	5	6

ID # _____

Internship Assessment by Interns

Read each of the statements below and mark what you think your behavior or ability level is for each statement using the scale below.

1	2	3	4	5
Lacks this behavior	Limited/Minimal	Adequate/Average	Above average	Exceptional

Initiative

1. Seeks opportunities to learn	1	2	3	4	5
2. Takes initiative to get a job done even if not specifically told to do so	1	2	3	4	5
3. Acts decisively on critical issues	1	2	3	4	5
4. Completes work despite obstacles/problems	1	2	3	4	5
5. Sets and communicates goals and follows up with results	1	2	3	4	5

Teamwork

1. Makes a positive impact on team by establishing rapport and credibility	1	2	3	4	5
2. Shares information/resources with others	1	2	3	4	5
3. Assists/cooperates with co-workers	1	2	3	4	5
4. Is willing to put in extra time and effort	1	2	3	4	5
5. Assumes appropriate leadership role(s)	1	2	3	4	5

Communication skills

1. Is willing to speak up and communicate information	1	2	3	4	5
2. Listens to feedback and acts to improve.	1	2	3	4	5
3. Writes clearly and concisely	1	2	3	4	5
4. Demonstrates oral communication skill required for the job	1	2	3	4	5
5. Asks for clarification, if needed	1	2	3	4	5

Problem Solving/Decision Making Skills

1. Analyzes situations and takes appropriate action	1	2	3	4	5
2. Offers creative solutions to problems	1	2	3	4	5
3. Collects and analyzes information to do a task and establishes a course of action	1	2	3	4	5
4. Resolves problems in an adequate time period	1	2	3	4	5
5. Is willing to learn new skills and enhance existing skills	1	2	3	4	5

Self Management

1. Produces high-quality, error-free work	1	2	3	4	5
2. Adopts new strategies when current approach is not effective	1	2	3	4	5
3. Uses good judgment/establishes priorities	1	2	3	4	5
4. Makes efficient use of time	1	2	3	4	5
5. Demonstrates/practices ethical behavior	1	2	3	4	5

APPENDIX H

INTERN POST-POST TEST INSTRUMENTS

ID # _____

Attitudes toward the Cooperative Extension Service

I am interested in your attitudes toward the Cooperative Extension Service. I am interested in your opinions of the Extension Service as it is (prior to the internship experience, after the internship experience), not how you wish it to be. Please respond to the items below. Mark only one X for each word pair. Place an X on the lines provided, not the spaces in between. For example:

If you feel that the Extension Service provides solutions, place the X

Provide solutions	_X_	____	____	____	____	____	____	Provide Resources

If you feel that the Extension Service provides resources, place the X

Provide solutions	____	____	____	____	____	____	_X_	Provide Resources

Or if you feel that the Extension Service provides a combination, place the X in the space you feel is appropriate.

Provide solutions	____	____	____	_X_	____	____	____	Provide Resources

---

Oklahoma Cooperative Extension Service

Education	____	____	____	____	____	____	____	Facilitation
Generalization	____	____	____	____	____	____	____	Specialization
Initiatives change	____	____	____	____	____	____	____	Preserves the past
Taking risk	____	____	____	____	____	____	____	Minimizing risk
Simple	____	____	____	____	____	____	____	Complex
Challenging	____	____	____	____	____	____	____	Cautious
High tech	____	____	____	____	____	____	____	Low tech
Grassroots initiatives	____	____	____	____	____	____	____	Top/Down Initiatives
Brainstorming	____	____	____	____	____	____	____	Structured analysis
Neutrality	____	____	____	____	____	____	____	Advocacy
Rural	____	____	____	____	____	____	____	Urban
Flexible	____	____	____	____	____	____	____	Rigid
Autonomous	____	____	____	____	____	____	____	Controlled
Isolation	____	____	____	____	____	____	____	Collaboration

ID # _____

Extension Educator's Self – Efficacy Inventory

Read each statement and indicate the extent to which you agree or disagree with that statement using the scale provided. Mark your responses by circling the number to the right of each statement.

1 Strongly Agree	2 Moderately Agree	3 Slightly Agree	4 Slightly Disagree	5 Moderately Disagree	6 Strongly Disagree

1. I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6
2. If someone opposes me, I can find means and ways to get what I want.	1	2	3	4	5	6
3. It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5	6
4. I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5	6
6. I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5	6
8. When I am confronted with a problem, I can usually find several solutions.	1	2	3	4	5	6
9. If I am in trouble, I can usually think of something to do.	1	2	3	4	5	6
10. No matter what comes my way, I am usually able to handle it.	1	2	3	4	5	6
11. I have the skills necessary to be an effective leader.	1	2	3	4	5	6
12. I have the diagnostic skills to assess the effectiveness of my programs.	1	2	3	4	5	6
13. I am able to make effective presentations to groups.	1	2	3	4	5	6
14. When a client has a concern, I am able to clarify and restate it in a helpful manner.	1	2	3	4	5	6
15. It is easy for me to write effective professional correspondence and memos.	1	2	3	4	5	6
16. When parents or community members become involved in projects, it is because I make special efforts to enlist their help.	1	2	3	4	5	6
17. I am skillful at scheduling activities involving my job.	1	2	3	4	5	6
18. When an event runs more smoothly than usual, it is because I exerted extra effort.	1	2	3	4	5	6
19. I have skills in working with groups that allow them to work effectively and efficiently.	1	2	3	4	5	6
20. If a client becomes angry or upset with me, I feel assured that I can handle those outbursts.	1	2	3	4	5	6
21. I am able to handle the unexpected events that arise during the course of the day.	1	2	3	4	5	6
22. Extension Educators make a difference when they are able to handle the tasks of their job.	1	2	3	4	5	6

APPENDIX I

MENTOR COVER LETTER,

CONSENT FORMS, AND EMAIL

Date 2007
May 9, 2007

Mentor Informed Consent Form

Internships with the Oklahoma Cooperative Extension Service: Linking students with the profession

Dear Mentor Participant:

Hello, my name is Lesley Lehenbauer and I am a graduate student at Oklahoma State University. I am conducting a research study involving the inaugural year of the Oklahoma Cooperative Extension Service internship program. The study is titled "**Internships with the Oklahoma Cooperative Extension Service: Linking students with the profession**" and is about the effects the internship experience has on collegiate student interns. Benefits associated with this study include improving upon the internship program and experience offered through the Cooperative Extension Service.

I am asking you to participant in this study because you have been selected as a mentor for the 2007 Oklahoma Cooperative Extension Service internship program. If you agree to participate, you will be completing a survey instrument after the first week of the internship and again after the internship is complete. The survey will ask you to evaluate the development of abilities of the intern you mentored. It will take approximately 15 minutes to complete the surveys.

The researchers will not use your name or any other identifying information in any report or document. We will use an ID number to record your responses. The list connecting your name to the ID number will be kept in a locked file in my office. I will be the only person with access to the information that will correlate your name with your survey responses. This information will only be kept in order to track your survey responses. The information obtained from the surveys will only be available to the evaluation team. The data will be kept securely until December 31, 2007 at which time it will be destroyed. There are no risks to you in sharing this information with us.

There are no known risks or direct benefits to those who participate in this research project.

You can decide if you want to participate. You will be given the option to refuse to answer any of the questions or withdraw at any time. If you choose to withdraw from the study, you have the right to tell us not to use any information that you have given us. You also have the right to receive a copy of the evaluation report if you so choose. Participation in this survey does not affect your participation in the internship program.

If you have any questions or need additional information, please feel free to contact me by phone at 405.744.8886. In person or by mail at 205 4-H Youth Development Building, Oklahoma State University, Stillwater, OK 74078. I can be reached by email at lesley.lehenbauer@okstate.edu.

If you have questions about your rights as a research volunteer, you may contact Dr. Sue C. Jacobs, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405.744.1676 or by email at irb@okstate.edu.

Sincerely,

Lesley Lehenbauer
Graduate Assistant
Oklahoma State University

Dr. Charles Cox
Interim Assistant Director and
State 4-H Program Leader – OCES
Oklahoma State University

OSU
Institutional Review Board
Approved 5/1/07
Expires 4/30/08
Initials AE 0519

Cooperative Extension Service Internship Program
Mentor Informed Consent Form
(To be returned to Lesley Lehenbauer)

This is to certify that I, _____, hereby consent to my voluntary participation in this study as an authorized part of the education and research program of Oklahoma State University.

I understand the information given to me. This study and my part in it have been fully explained to me by this letter. I have received answers to any questions that I had about the research/evaluation procedure. I understand and agree to the conditions of this study as described. I understand that I will receive a signed copy of this consent form.

I understand that I may decline to answer specific questions or items in the surveys.

I understand that any data or answers will be confidential.

Participation in this research study is voluntary and I can withdraw from the research activity at any time without reprisal or penalty. There are no risks if I withdraw from the research study.

Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and/or data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Signatures:
I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

_____ _____

Signature Mentor Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

_____ _____

Signature of Researcher Date

Cooperative Extension Service Internship Program
Mentor Informed Consent Form
(To be kept by the mentor participant)

This is to certify that I, _____, hereby consent to my voluntary participation in this study as an authorized part of the education and research program of Oklahoma State University.

I understand the information given to me. This study and my part in it have been fully explained to me by this letter. I have received answers to any questions that I had about the research/evaluation procedure. I understand and agree to the conditions of this study as described. I understand that I will receive a signed copy of this consent form.

I understand that I may decline to answer specific questions or items in the surveys.

I understand that any data or answers will be confidential.

Participation in this research study is voluntary and I can withdraw from the research activity at any time without reprisal or penalty. There are no risks if I withdraw from the research study.

Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and/or data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Signatures:
I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

_____ _____

Signature Mentor Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

Lesley Behenbauer _____

Signature of Researcher Date

Dear Mentor Participant:

Hello, my name is Lesley Lehenbauer and I am a graduate student at Oklahoma State University. I am conducting a research study involving the inaugural year of the Oklahoma Cooperative Extension Service internship program. The study is titled "**Internships with the Oklahoma Cooperative Extension Service: Linking students with the profession**" and is about the effects the internship experience has on collegiate student interns. Benefits associated with this study include improving upon the internship program and experience offered through the Cooperative Extension Service.

I am asking you to participant in this study because you have been selected as a mentor for the 2007 Oklahoma Cooperative Extension Service internship program. If you agree to participate, you will be completing a survey instrument after the first week of the internship and again after the internship is complete. The survey will ask you to evaluate the development of abilities of the intern you mentored. It will take approximately 15 minutes to complete the surveys.

If you are interested in participating in this study, please reply to this email and I will send you more information about the study and a consent form. If you would prefer to call and talk with me, I can be reached at 405.744.8886.

Thank you for your time and I look forward to hearing from you.

Sincerely,

Lesley Lehenbauer

APPENDIX J

MENTOR PRE TEST INSTRUMENTS

ID # _____

Mentor Demographic Information

Please place an X on the appropriate line(s).

Gender:
____ Male
____ Female

Please indicate the year you were born: ____

Staffing Assignment(s):
____ Agriculture
____ Family and Consumer Sciences
____ 4-H Youth Development
____ Rural and Community Development

Please indicate the number of years you have worked with the Cooperative Extension Service: ____

Have you served as a mentor before? _____ Yes _____ No

Have you had any formal mentoring class or training? _____ Yes _____ No

ID # _____

Attitudes toward the Cooperative Extension Service

I am interested in your attitudes toward the Cooperative Extension Service. I am interested in your opinions of the Extension Service as it is (prior to the internship experience, after the internship experience), not how you wish it to be. Please respond to the items below. Mark only one X for each word pair. Place an X on the lines provided, not the spaces in between. For example:

If you feel that the Extension Service provides solutions, place the X

Provide solutions	_X_	____	____	____	____	____	____	Provide Resources

If you feel that the Extension Service provides resources, place the X

Provide solutions	____	____	____	____	____	____	_X_	Provide Resources

Or if you feel that the Extension Service provides a combination, place the X in the space you feel is appropriate.

Provide solutions	____	____	____	_X_	____	____	____	Provide Resources

---

Oklahoma Cooperative Extension Service

Education	____	____	____	____	____	____	____	Facilitation
Generalization	____	____	____	____	____	____	____	Specialization
Initiatives change	____	____	____	____	____	____	____	Preserves the past
Taking risk	____	____	____	____	____	____	____	Minimizing risk
Simple	____	____	____	____	____	____	____	Complex
Challenging	____	____	____	____	____	____	____	Cautious
High tech	____	____	____	____	____	____	____	Low tech
Grassroots initiatives	____	____	____	____	____	____	____	Top/Down Initiatives
Brainstorming	____	____	____	____	____	____	____	Structured analysis
Neutrality	____	____	____	____	____	____	____	Advocacy
Rural	____	____	____	____	____	____	____	Urban
Flexible	____	____	____	____	____	____	____	Rigid
Autonomous	____	____	____	____	____	____	____	Controlled
Isolation	____	____	____	____	____	____	____	Collaboration

ID # _____

Internship Assessment by Mentor

Read each of the statements below and mark what you think the student's behavior or ability level is for each statement using the scale below.

1 Lacks this behavior	**2** Limited/Minimal	**3** Adequate/Average	**4** Above average	**5** Exceptional

Initiative

1. Seeks opportunities to learn	1	2	3	4	5
2. Takes initiative to get a job done, even if not specifically told to do so	1	2	3	4	5
3. Acts decisively on critical issues	1	2	3	4	5
4. Completes work despite obstacles/problems	1	2	3	4	5
5. Sets and communicates goals and follows up with results.	1	2	3	4	5

Teamwork

1. Makes a positive impact on team by establishing rapport and credibility.	1	2	3	4	5
2. Shares information/resources with others	1	2	3	4	5
3. Assists/cooperates with co-workers	1	2	3	4	5
4. Is willing to put in extra time and effort	1	2	3	4	5
5. Assumes appropriate leadership role(s)	1	2	3	4	5

Communication skills

1. Is willing to speak up and communicate information	1	2	3	4	5
2. Listens to feedback and acts to improve.	1	2	3	4	5
3. Writes clearly and concisely	1	2	3	4	5
4. Demonstrates oral communication skills required for the job	1	2	3	4	5
5. Asks for clarification, if needed	1	2	3	4	5

Problem Solving/Decision Making Skills

1. Analyzes situation and takes appropriate action	1	2	3	4	5
2. Offers creative solutions to problems	1	2	3	4	5
3. Collects and analyzes information to do a task and establishes a course of action	1	2	3	4	5
4. Resolves problems in adequate time period	1	2	3	4	5
5. Is willing to learn new skills and enhance existing skills	1	2	3	4	5

Self Management

1. Produces high-quality, error free work	1	2	3	4	5
2. Adopts new strategies when current approach is not effective	1	2	3	4	5
3. Uses good judgment/establishes priorities	1	2	3	4	5
4. Makes efficient use of time	1	2	3	4	5
5. Demonstrates/practices ethical behavior.	1	2	3	4	5

APPENDIX K

MENTOR POST TEST INSTRUMENTS

ID # _____

Attitudes toward the Cooperative Extension Service

I am interested in your attitudes toward the Cooperative Extension Service. I am interested in your opinions of the Extension Service as it is (prior to the internship experience, after the internship experience), not how you wish it to be. Please respond to the items below. Mark only one X for each word pair. Place an X on the lines provided, not the spaces in between. For example:

If you feel that the Extension Service provides solutions, place the X

Provide solutions	_X_	____	____	____	____	____	____	Provide Resources

If you feel that the Extension Service provides resources, place the X

Provide solutions	____	____	____	____	____	____	_X_	Provide Resources

Or if you feel that the Extension Service provides a combination, place the X in the space you feel is appropriate.

Provide solutions	____	____	____	_X_	____	____	____	Provide Resources

---

Oklahoma Cooperative Extension Service

Education	____	____	____	____	____	____	____	Facilitation
Generalization	____	____	____	____	____	____	____	Specialization
Initiatives change	____	____	____	____	____	____	____	Preserves the past
Taking risk	____	____	____	____	____	____	____	Minimizing risk
Simple	____	____	____	____	____	____	____	Complex
Challenging	____	____	____	____	____	____	____	Cautious
High tech	____	____	____	____	____	____	____	Low tech
Grassroots initiatives	____	____	____	____	____	____	____	Top/Down Initiatives
Brainstorming	____	____	____	____	____	____	____	Structured analysis
Neutrality	____	____	____	____	____	____	____	Advocacy
Rural	____	____	____	____	____	____	____	Urban
Flexible	____	____	____	____	____	____	____	Rigid
Autonomous	____	____	____	____	____	____	____	Controlled
Isolation	____	____	____	____	____	____	____	Collaboration

ID # _____

Internship Assessment by Mentor

Read each of the statements below and mark what you think the student's behavior or ability level is for each statement using the scale below.

1	2	3	4	5
Lacks this behavior	Limited/Minimal	Adequate/Average	Above average	Exceptional

Initiative

1. Seeks opportunities to learn	1	2	3	4	5
2. Takes initiative to get a job done, even if not specifically told to do so	1	2	3	4	5
3. Acts decisively on critical issues	1	2	3	4	5
4. Completes work despite obstacles/problems	1	2	3	4	5
5. Sets and communicates goals and follows up with results.	1	2	3	4	5

Teamwork

1. Makes a positive impact on team by establishing rapport and credibility.	1	2	3	4	5
2. Shares information/resources with others	1	2	3	4	5
3. Assists/cooperates with co-workers	1	2	3	4	5
4. Is willing to put in extra time and effort	1	2	3	4	5
5. Assumes appropriate leadership role(s)	1	2	3	4	5

Communication skills

1. Is willing to speak up and communicate information	1	2	3	4	5
2. Listens to feedback and acts to improve.	1	2	3	4	5
3. Writes clearly and concisely	1	2	3	4	5
4. Demonstrates oral communication skills required for the job	1	2	3	4	5
5. Asks for clarification, if needed	1	2	3	4	5

Problem Solving/Decision Making Skills

1. Analyzes situation and takes appropriate action	1	2	3	4	5
2. Offers creative solutions to problems	1	2	3	4	5
3. Collects and analyzes information to do a task and establishes a course of action	1	2	3	4	5
4. Resolves problems in adequate time period	1	2	3	4	5
5. Is willing to learn new skills and enhance existing skills	1	2	3	4	5

Self Management

1. Produces high-quality, error free work	1	2	3	4	5
2. Adopts new strategies when current approach is not effective	1	2	3	4	5
3. Uses good judgment/establishes priorities	1	2	3	4	5
4. Makes efficient use of time	1	2	3	4	5
5. Demonstrates/practices ethical behavior.	1	2	3	4	5

VITA

Lesley Renee Lehenbauer-Meier

Candidate for the Degree of

Master of Science

Thesis: AN ASSESSMENT OF THE OKLAHOMA COOPERATIVE EXTENSION SERVICE INTERNSHIP PROGRAM

Major Field: Agricultural Education

Biographical:

Personal Data: Born December 17, 1981, the daughter of Ronald and Michelle Lehenbauer of Hannibal, Missouri. Married Gregory Paul Meier on October 20, 2007.

Education: Graduated from Palmyra R-I High School, Palmyra, Missouri in May 2000, received a Bachelor of Science degree in Agricultural Education, Leadership & Communication with minors in Agricultural Economics and Plant Science from the University of Missouri, Columbia, Missouri in May 2004. Completed the requirements for a Master of Science in Agricultural Education at Oklahoma State University, Stillwater, Oklahoma in May, 2008.

Experience: Senior Auditor with MFA Inc. in Columbia, Missouri from September 2004 to June 2006. Graduate assistant with Oklahoma State 4-H at Oklahoma State University from August 2006 to April 2008.

Professional Memberships: Phi Kappa Phi Honor Society, Omicron Delta Kappa, Gamma Sigma Delta Agricultural Honor Society

Name: Lesley Renee Lehenbauer-Meier Date of Degree: May, 2008

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: AN ASSESSMENT OF THE OKLAHOMA COOPERATIVE EXTENSION SERVICE INTERNSHIP PROGRAM

Pages in Study: 143 Candidate for the Degree of Master of Science

Major Field: Agricultural Education

Scope and Method of Study:

The purpose of the study was to evaluate the Oklahoma Cooperative Extension Service internship program and establish baseline data as a means to evaluate the internship experience. Research objectives were: (1) Describe the demographic characteristics of the interns and mentors. (2) Describe the interns' and mentors' attitudes toward the Cooperative Extension Service. (3) Describe the interns' perceived self-efficacy in terms of general and expertise self-efficacy questions. The expertise self-efficacy questions related specifically to an Extension Educators job. (4) Describe the interns' assessments of their skills and abilities related to the internship as well as the mentors' assessments of the interns' skills and abilities.

Findings and Conclusions:

In general, the interns had a positive experience. (1) The intern population was diverse, representing a broad spectrum of students with a variety of majors represented. The mentors were experienced Educators with the Cooperative Extension Service and mentoring. (2) The internship experience had an effect on the interns' attitudes toward the Cooperative Extension Service. Their views shifted from a contemporary to a more traditional view. (3) Interns became more efficacious during their internship as they experienced the duties and roles of Extension educators. (4) An assessment of the skills and abilities of the interns showed an improvement of skills and abilities in five categories from both the interns and mentors views.

ADVISER'S APPROVAL: Dr. William Weeks