Educational Philosophies and Teaching Styles of Alabama Cooperative Extension System Agents

by

William Tom East, Jr.

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Education

Auburn, Alabama
August 3, 2013

Keywords: educational philosophy, teaching style,
adult education, extension

Approved by

James E. Witte, Chair, Professor of Educational Foundations, Leadership and Technology
Daniel J. Henry, Assistant Professor, Educational Foundations, Leadership and Technology
Maria M. Witte, Associate Professor, Educational Foundations, Leadership and Technology

Abstract

This study examines the educational philosophies and teaching styles of Extension agents in the Alabama Cooperative Extension System. The Philosophy of Adult Education Inventory (PAEI) designed by Zinn and the Principles of Adult Learning Scale (PALS) developed by Conti were the instruments used in this study. The PAEI identifies the educator's personal philosophical orientation toward teaching adults and the PALS identifies the educator's preferred teaching styles. The relationships were examined between these educational philosophies and teaching styles.

Seventy survey instruments were completed by agents in the five program areas of agriculture; forestry, wildlife, and natural resources; family and consumer science; community development; and 4-H. The response rate for this study was 25 percent.

The mean scores for the PAEI were highest in the progressive philosophy for all five groups. The second most agreed with philosophy was behavioral. Several of the Extension agents scored high in more than one philosophy which is common. The least agreed with philosophy was radical.

Most of the mean scores for the PALS fell below Conti's established mean score which suggests that most agents have a teacher-centered approach to educating adults rather than a student-centered approach. The family and consumer science group had the highest scores on the PALS survey which meant they were more student-centered than the other groups.

Acknowledgements

We all know the story about the turtle sitting on top of a fence post. We do not know how the turtle got on top of the fence post, but we do know it did not get there by itself. It had to have some help. I want to thank God for directing me to this endeavor, and for giving me the ability to accomplish it. A special thanks to my committee, Dr. Jim Witte, Dr. Maria Witte, and Dr. Daniel Henry for taking time to help me through this process. Their door was always open and I always left each meeting with a greater sense of direction as well as inspiration. Dr. Betsy Ross was not on my committee, but very helpful in guiding me through the statistics. These are excellent instructors who were never too busy to help and always encouraging.

I have received many encouraging words from family and friends. Too many people to name, but positive words go a long way. A very special thanks to my wife, Cindee East, who supported me all the way. This was a long process, and I could not have stayed with it without her encouragement. Our children, Clay and Sarah, motivated me even though they may be too young to remember me being in school.

TABLE OF CONTENTS

List of Tables

Chapter 1

Introduction

The Cooperative Extension System is the world's largest non-formal, adult and youth out-of-school, educational organization (Seevers, Graham, & Conklin, 2007). The organization was first started beginning with the land grant colleges through the Morrill Acts of 1862 and 1890. The Smith-Lever Act of 1914 was the final piece of legislation that created what is known today as Cooperative Extension (Seevers, et al., 2007). Cooperative Extension is found in all 50 states and each state has the same mission, to enable people to improve their lives and communities through learning partnerships that put knowledge to work (Seevers, et al., 2007).

The term cooperative refers to the three partners, federal, state, and local governments, which fund the Extension System (Seevers, et al., 2007). These funding agencies along with grants and fees provide support for the agents, faculty, and administration in the organization.

The state of Alabama has Auburn University and Alabama A&M University working as an Extension System and Tuskegee University as a partner. Extension in many states is called the Extension Service, but in Alabama it is referred to as the Extension System.

The Alabama Cooperative Extension System (ACES) uses Agent Assistants, County Agents, Regional Agents, Urban Agents, and County Coordinators to deliver information to the citizens of Alabama. There are five major program areas in which these Extension Agents work. These are agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development. The County Agents,

Regional Agents, Urban Agents, and County Coordinators all have a college degree; usually that degree is related to the program area they work. They also have unique experiences that help them educate others in their particular program area.

Statement of the Problem

The Alabama Cooperative Extension System offers numerous trainings designed to further increase the subject matter knowledge of their agents. These trainings are essential for Extension Agents. While the Extension Agents are very knowledgeable in their program area, they may have never been taught how to effectively educate adults. Knowles (1970) expresses that a distinct and different technology exists for adult learning. Adults have special needs and requirements as learners, as compared to children and teens. An effective instructor understands how adults learn best (Lieb, 1991). New theories have developed in the area of adult learning as being different from traditional instruction for effectively teaching youth. Physical, psychological, and social characteristics of adults are different than those of young people and children. These differences should be taken into consideration when attempting to create the most effective learning environment for adults (Kennedy, 2003). However, in addition to one's knowledge of the subject matter, other aspects such as their educational philosophy and teaching styles can influence the effectiveness of their teaching. (Williams, 1999).

A person's educational philosophy is a combination of what someone believes about teaching and learning and how they implement it in practice. Both the teacher and adult student have educational philosophies. It is very important not to let those two philosophies clash (Tisdell & Taylor, 1999).

Extension Agents enter the adult education field through widely different backgrounds. It is likely, through different backgrounds we find varied beliefs about how to teach, what to teach,

and why adults are there to learn (Zinn, 2004). Zinn (2004) suggests that understanding your philosophy of adult education will not make you a philosopher, but will make you a better adult educator.

An educator's understanding of their teaching style is extremely important. In some cases multiple teaching styles may be used depending on the learning atmosphere (Louisell & Descamps, 1992). An educator's teaching style can make a significant difference and have a definite effect on a student's education (Zinn, 2004). A study by Conti (2004) revealed that student achievement can be significantly affected by an educator's teaching style.

It has been said that academic preparation is needed for adult educators to teach effectively (Caldwell, 1981). Whether most ACES agents could identify their adult education philosophy is a question that can be addressed. Most of these agents began their career as an ACES agent from a subject matter background and never thought about the importance of understanding their educational philosophy. There may also be a question as to the possibility of these agents comparing their educational philosophies to their teaching styles so they may make adjustments to become better adult educators if needed.

Purpose of the Study

The purpose of this study was to identify the individual educational philosophies and teaching styles of Extension Agents in ACES using the Philosophy of Adult Education Inventory (PAEI) and Principles of Adult Learning Scale (PALS) instruments. The study also examined the relationship between the educational philosophies and teaching styles of Extension Agents and their respective subject matter areas.

Research Questions

1. What are the educational philosophies of Extension Agents in the Alabama Cooperative Extension System using Zinn's Philosophy of Adult Education Inventory (PAEI)?
2. What are the teaching styles of the Extension Agents in the Alabama Cooperative Extension System using Conti's Principles of Adult Learning Scale (PALS)?
3. What is the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development?

Hypothesis

The participants in this study were Alabama Cooperative Extension System Agents in the program areas of agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development and 4-H, and youth development. There were three hypotheses to be tested (at the $\alpha = .05$ level) relating to these program areas:

H_0^1: There are no significant differences among these program areas of agents in their adherence to each of the philosophies of adult education: liberal, behaviorist, progressive, humanistic, and radical.

H_O^2: There are no significant differences among these program areas of agents in their cumulative scores of teaching style and each of the seven factors of teaching style: learner-

centered activities, personalized instruction, relating experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development.

$H_O{}^3$: There are no significant correlations among these program areas of agents in their adherence to each of the philosophies of adult education (liberal, behaviorist, progressive, humanistic, and radical) and their teaching style cumulative scores and scores on the seven factors (learner-centered activities, personalized instruction, relating experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development).

Significance of the Study

Malcolm Knowles suggested that adults are more than grown up children. They possess unique characteristics as learners that require different principles and techniques from those used with children. Good adult educators do not just happen; they develop by learning principles and teaching technique (Knowles, 1970). The awareness of an educator's philosophy can distinguish the adult educator from the worker in adult education (Knowles, 1960).

Many people are in the role of adult educator. Many of these educators do not realize the knowledge and techniques that are available to them to help perform this role better (Knowles, 1970). By comparing the educator's teaching style determined through PALS and the philosophical orientation found in Zinn's philosophy inventory, an educator can determine if their facilitation practices match their philosophical beliefs and values. Through the use of these resources, the educator will be aware of what they are doing and why they are doing it (Galbraith, 1991).

Limitations

1. The study was limited to Extension Agents in the ACES including Agent Assistants, County Agents, Regional Agents, Urban Agents, and County Coordinators. The ACES state administrators were not included in this study.
2. The participants in this study were employees in the ACES and the results may not be representative of all Extension educators.
3. Despite the participants being assured there were no right or wrong answers to the survey instrument, respondents may have answered according to their perception of correct adult education theories rather than accurately reporting their own philosophies and teaching styles.
4. Some degree of sampling bias exists in this study as some Alabama Cooperative Extension System agents may not been included in this study. To compensate for this bias, the survey instrument was e-mailed to Extension agents in the Alabama Cooperative Extension System as Extension agents in general are comfortable and competent with the use of computers. Electronic mail is the primary means of communication within the Alabama Cooperative Extension System.

Assumptions

1. Most Extension Agents in the ACES have never used the PAEI instrument to determine their educational philosophy or the PALS instrument to determine their teaching style.

2. Most Extension Agents in the ACES have never thought about the possibility of becoming better adult educators through a greater understanding their educational philosophies and teaching styles.

Definitions of Terms

The following represents definitions of terms as applied within this study:

ACES: Alabama Cooperative Extension System.

Agent Assistant: A paraprofessional that assists in program delivery. The program curriculum would be created by a professional. This position does not require a professional degree.

County Agent: A professional that creates and delivers curriculum to clientele, usually in only one county.

County Coordinator: A professional that manages the Extension efforts in a county. They may have program responsibility in more than one program area.

Extension Agent: Agent Assistants, County Agents, Regional Agents, Urban Agents, and County Coordinators.

Philosophy of Adult Education Inventory: (PAEI) An instrument developed by Lorraine Zinn in 1983 to measure the educational philosophies of adult educators.

Principle of Adult Learning Scale: (PALS) An instrument developed by Gary Conti to measure the teaching styles of educators.

Regional Agent: A professional that conducts programs and works with clientele in several counties, usually within one program area.

Urban Regional Agent: A professional that conducts programs and works with clientele in an urban county. They may have program responsibility in more than one program area.

Summary

Adults cannot simply rely on self-learning to gain the knowledge required in this changing world (Jensen, Leveright, & Hallenbeck, 1964). The ability for the Alabama Cooperative Extension System's agents to teach effectively is very important. An educator having subject knowledge without the ability to teach it is ineffective. The importance of understanding teaching styles and educational philosophies has been around for some time. However, little research has been conducted to determine if Extension Agents understand their own teaching styles and educational philosophies in order to become better educators.

The purpose of this study and its research questions, as well as the presentation of the problem, the limitations, and definitions of the terms is introduced in Chapter 1. In Chapter 2, there is a review of related literature concerning educational trainings for Extension Agents in the ACES, the five prevalent educational philosophies (liberal, progressive, behaviorist, humanist, radical), and the two teaching styles (teacher and learner-centered). Chapter 3 outlines the design, population, instruments used, and data analysis. Chapter 3 also includes explanations of the two survey instruments, the PAEI (Philosophy of Adult Education Inventory) and PALS (Principle of Adult Learning Scale). The results of the study are presented in Chapter 4. Chapter 5 includes a summary, conclusions of the research, recommendations for further study, and implications that can be used in the field.

Chapter 2

Review of Literature

Research Questions

The following research questions were used in this study:

1. What are the educational philosophies of Extension Agents in the Alabama Cooperative Extension System using Zinn's Philosophy of Adult Education Inventory (PAEI)?
2. What are the teaching styles of the Extension Agents in the Alabama Cooperative Extension System using Conti's Principles of Adult Learning Scale (PALS)?
3. What is the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development?

Introduction

The Alabama Cooperative Extension System is a public-funded educational organization. The education and research resources of the United States Department of Agriculture, land grant universities, and county administrative units are interconnected through this system. The Extension System, as it is called in Alabama, attempts to meet the educational needs of people so that they can make practical decisions that will improve their lives. It is a dynamic organization that is always changing to better meet the needs of people. The Extension System endeavors to

provide practical and unbiased information based on the research and expertise of all its partners. At the time the Extension System was created, there were many people who did not attend college. The Extension System was developed as a way to bring college to the communities.

ACES agents are educators. Thus, their teaching styles and philosophies are an important component of their job. The purpose of this chapter is to present a review of literature related to this study.

Pedagogy and Andragogy

Pedagogy refers to teacher-centered education. The teacher is in control of what will be learned, how it will be learned, and when it will be learned (Conner, 2004). When education was first scientifically studied, research centered on reactions to systemic learning, which reinforced the pedagogical model. Teachers began to notice that many assumptions in the pedagogic model did not fit adult learners. Adults seemed to resist traditional pedagogical teaching methods, such as lectures, reading assignments, and note memorizing (Holmes & Abington-Cooper, 2000). Because the student is not in charge of his or her own learning pace or style, pedagogy usually refers to the education of children rather than adults. Education is usually treated as a process of active inquiry in this teacher-focused learning.

It was not until the 1960s that teachers began to question the idea that adults and children learn in the same way (Holmes & Abington-Cooper, 2000). Successful adult educators realize that adults cannot be taught the same way as children. Yet, before the 1960s little research had been done in this area. It was important that a comprehensive theory of adult learning be developed so that it could provide guidelines for teachers and educators (Knowles, 1977).

A German teacher named Alexander Kapp first used the term andragogy in 1833. Others have used the term, but it was Malcom Knowles who popularized the term in the 1970's. Knowles defines andragogy as the art and science of helping adults learn (Reischmann, 2004).

Andragogy is basically self-directed study. Andragogy is the method used to assist adults in developing their full potential. The emotional, psychological, and intellectual being of a student should be involved in the learning process, and the teacher should simply facilitate adults in becoming self-directed learners (Holmes & Abington-Cooper, 2000). For an adult education program to increase a student's chances of success there needs to be adequate preparation in andragogy (Boone, Gartin, Wright, Lawrence, & Odell, 2002). The transmission of knowledge and skills is the main concern of the pedagogical model. However, providing resources for learners to acquire information and skills is the focus of the andragogical model. With the andragogical model, the educator has responsibilities such as creating a favorable climate for learning, planning and formulating objectives, designing and conducting learning experiences, and evaluating learning outcomes. Andragogy supports the idea that there is a difference in how people learn, and that everyone should be taught in the way he or she learns best (Holmes & Abington-Cooper, 2000). The adult learner is different in his or her personality, attitude, and experiences. Adult learners also view teachers differently than children and can be threatened by learning situations since they often believe they know more than they actually do (Bergevin, 1967).

According to Knowles, andragogy is based on five assumptions which differentiate the adult learners from the child learners. These five assumptions are self-concept, experience, readiness to learn, orientation to leaning, and motivation to learn (Smith, 2002).

The learner's self-concept is the learner directing his or her own education. Traditional schooling requires that the student learn what the teacher wants him or her to learn. The role of the adult educator is to allow students to be self-directed toward what they will learn (Fidishun, n.d.).

The adult learner's experience can play a large role in the education of that adult student. Assignments that involve case studies, reflective activities, and group projects can all use the experience of the adult student to facilitate learning. Adult students can use past experiences to help them learn, or their shared experiences can help others (Fidishun, n.d.).

Adult students are ready to learn about a topic when they realize why they should learn about such a topic. The use of role playing may help students understand why they should learn something (Fidishun, n.d.).

An adult's orientation to learning is task or problem centered. Adults have a need to see how what they are learning will help them in life, such as on the job or at home. The adult educator can encourage the learning process by providing real-life examples (Fidishun, n.d.). Adults need to know that what they learn can be used in real life situations. For example, training that can benefit the student in the workplace will have a greater meaning for him or her. The adult learner needs to be treated as a professional. Knowledge will be obtained if adults are given some additional information such as to the what, how, why, when, and where details of their learning (Galbo, 1998).

A key part of andragogy and a key to being an effective facilitator is understanding how past experiences influence how adults perceive their current world. For most adults, education is most effective when it is relevant to and has a direct impact on their lives. A sense of responsibility for their learning is one of the main factors in adult learning. The adult must feel

that he or she has a role in the what, why, and how of learning (Brookfield, 1986). Adult students are motivated to learn by many things. Such motivators can be a raise in pay, an additional degree or skill, job satisfaction, and more self-esteem (Fidishun, n.d.). Knowledge gained means more if it incorporates the learner's perspectives and personal experiences. An experience is made educational by reflecting on and evaluating it. Personal experiences must be incorporated into the educational process, either by creating experiences for learners or by having learners analyze previous experiences (Caudron, 2000). Also, the content and process of learning must be related to the past experiences of the learner (Brookfield, 1986).

Teachers should be a facilitator of learning rather than a transmitter of knowledge, and they should employ a method based on the experiences of the student. The learner should actively inquire about, rather than simply be a passive recipient of knowledge (Knowles, 1977). According to Knowles (1977), by the end of the 1960s,

> teachers of children and youth were discovering that the new theoretical framework had some implications for their practice, and andragogy was beginning to take on the meaning of 'the art and science of helping human beings learn' rather than its original definition as 'the art and science of teaching adults'. (p. 344)

Self-Directed Learning

Knowles (1990) describes self-directed learning as "a *process* in which individuals take the initiative, with or without the help of others…" (p. 135). When adults take control of their own learning, it is called self-directed learning. Adults identify their own learning needs, goals, and resources. They choose their own learning strategies and evaluate their own learning outcomes. It was later decided that self-directed learning is a more complex idea (Merriam &

Brockett, 1997). Seaman and Fellenz (1989) describe self-directed learning as "adult learning efforts that are initiated and directed by the individual" (p. 26).

Self-directed learning is a term used to describe learning on one's own. According to this view, the primary responsibility of planning, doing, and evaluating learning belongs to the learner alone. The main reasons adults engage in self-directed learning are many. One of the reasons is that the learner is in control of his or her own learning, and adults like to feel they are in control. The learner has the freedom to set his or her own learning pace and structure. Self-directed learning also gives adults their own amount of desired flexibility in the learning process (Merriam & Caffarella, 1991).

According to Cross (1981), self-directed learning may be the most ignored area of education. Cross (1981) defines self-directed learning as "deliberate learning in which the person's primary intention is to gain certain definite knowledge or skills" (p. 186). When self-directed learning was first examined, it was believed that it was similar to formal learning. Learners were seen as planning and carrying out their learning activities in the same pattern as traditional students. Later, however, many variables were seen to influence the self-directed learning process (Merriam & Caffarella, 1991).

Brookfield (1986), at times, views all adults as self-directed learners, and educators as facilitating this natural ability. Educators should facilitate the learning process of their students, especially in self-directed learners. An educator can help nurture self-directed learning in adults by giving them necessary attention and being responsive and understanding (Brookfield, 1986). Skager (1978) indicated that self-directed learning needs to be facilitated in order to lead to a practice of lifelong learning. Adult educators should assist learners with the procedural aspect of learning rather than concentrating so much on the content (Merriam & Caffarella, 1991).

Self-directed learning takes place by chance as well as being planned out. The individual learners determine which way learning occurs based on their experiences, interests, and circumstances, among other things (Merriam & Caffarella, 1991). According to Long (1983), the majority of learning by self-directed learners is done alone. However, self-directed learners do not learn in isolated settings. They often seek out available resources, including other people, as they proceed through the learning process (Candy, 1991; Knowles, 1990; Merriam & Caffarella, 1991). In other types of learning, access to knowledge is created by teachers for the students. In self-directed learning, students are more likely to access knowledge themselves (Lagenbach, 1988).

Self-directed learning has gained some distinction since the 1960s, and many adults have participated in self-directed projects. According to Apps (1985), learning outside organized educational settings is not uncommon. The more formal schooling a person has, the more likely that person is to participate in organized adult/continuing education programs (Apps, 1985). In addition to andragogy and pedagogy, the terms self-directed learning and teacher-directed learning have been proposed. Learners that are intrinsically and highly motivated are usually better suited for the self-directed approach. The teacher-directed approach may benefit learners that are less motivated. With the teacher-directed approach, the teacher is in charge of the classroom. Students must follow the objectives and requirements set by the teacher. The teacher is responsible for providing leadership and evaluation of the students. Being an adult does not automatically mean that a learner is self-directed. Adults' ability for self-directed learning can vary greatly. An adult may not be a self-directed learner in every situation. A self-directed learner is not required to always learn in a solitary setting. Self-directed learners can learn in any setting, whether informal or traditional (Holmes & Abington-Cooper, 2000).

Teaching/Working Philosophy

An important step in becoming an educator is to develop a working philosophy of education (Spurgeon & Moore, 1997). Philosophizing, per se, has not been popular. However, adult educators are guided by some set of beliefs and principles that constitutes an educational philosophy (Long, 1983). Long (1983) defined philosophy as "a set of motivating beliefs, concepts, and principles" (p. 294). According to Heimlich and Norland (1994), "combined beliefs, values, and attitudes about the teaching-learning exchange form the basis of one's teaching philosophy" (p. 33). Robinson (2002) refers to educational philosophy as learning the best way to use ideas about teaching.

One of the first priorities of any educator should be to develop a working philosophy of education (Spurgeon & Moore, 1997). Teachers need a philosophy of education so that they can be effective. As they develop their philosophy, teachers become more rational and critical of education (Elias, 1995). As stated by Apps (1973), "developing a working philosophy is the search for principles-the discovery and development of what we believe about various basic elements of adult education" (p. 1). An educator's working philosophy is a result of personal values, experiences, and lifestyles. An educator's philosophy is clearly reflected in his or her teaching. By evaluating their philosophy, educators will gain more control over the decisions they make in the classroom (White & Brockett, 1987). Each educational decision and experience help an educator develop his or her working philosophy (Spurgeon & Moore, 1997). The adult educator uses a well-developed working philosophy in many situations. Adult educators need a well-developed philosophy of education to keep them from being lost in a larger agency or program. A well-developed philosophy also keeps educators from teaching in the same way all the time just because they have always done it that way (Apps, 1973). It is vital for adult

educators to recognize how important their philosophical orientation is to their practice (Collins, 1986). The development of one's educational philosophy is a constant process that is never completely finished. Every educational experience and decision can help shape an educator's philosophy into a more useful one (Spurgeon & Moore, 1997). Oftentimes, adult educators do not take the time to scrutinize their educational philosophy. Through this scrutiny, adult educators can improve their teaching habits and become more successful (Apps, 1985). McKenzie (1985) agreed when he said that adult educators should often reflect on their educational philosophy and the theoretical principles upon which it is based. This allows the educator to adapt and respond to new situations and experiences in a more effective manner (McKenzie, 1985). According to Heimlich and Norland (1994), reflection is needed for information to become knowledge. And, by analyzing and reflecting upon their philosophy, educators can assure that what they believe in practice is what they are actually doing in the classroom (Merriam & Brockett, 1997). Knowles (1951) agrees that every adult educator needs to evaluate and redefine his or her philosophy of education periodically. A systematic analysis of educators' principles, values, and assumptions affects decisions and policies that are made, enables good communication between educators and students, and encourages the development of adult education as a professional field (Merriam & Brockett, 1997). By discovering their beliefs and recognizing their own behavior, educators will be able to explore and grow in new ways (Heimlich & Norland, 1994).

Educators need to develop their philosophy of education before developing goals and objectives for their adult education programs. Often educators are not concerned with determining their educational philosophy. The function of education is to cause learners to look inside themselves to determine the source of their identity, freedom, and responsibility for

mature decision-making and commitment. By reflecting on existing circumstances, adult learners can explore their own perceptions and attitudes (de Chambeau, 1977). Understanding one's teaching philosophy can also enhance other aspects of a teacher's professional life. Being aware of their teaching philosophy can help teachers communicate more clearly and confidently in the classroom (Heimlich & Norland, 1994). It is extremely insightful and helpful for adult educators to understand where their personal working philosophy fits into the view of educational philosophies (Giroday, 2006). A good educator creates an atmosphere that is informal and friendly. This classroom atmosphere should encourage a mutual respect between teacher and student. Teachers should lead learning activities. However, the teacher should not forget that according to adult education philosophy, everyone has something to teach and learn (Kennedy, 2003). As Apps (1985) noted:

> I believe that all of us who are practitioners in continuing education must, from time to time, reflect on our practice and ask penetrating questions. We must, I believe, learn how to systematically analyze what we do and how and why we do it and to reflect on the outcomes of our efforts (p. 5).

Boone, Gartin, Wright, Lawrence, and Odell (2002) said that agricultural educators should examine their own personal educational philosophies before attempting to educate adults. The knowledge of how one's educational philosophy affects his or her relationships with others is the basis for improving the effectiveness of teaching. This knowledge also provides educators with the necessary flexibility and consistency that is needed when dealing with adult learners (Boone, et al., 2002). Holmes and Abington-Cooper agreed when they said that educators need to be aware of their personal philosophies when they work with adults (Holmes & Abington-Cooper,

2000). “In this sense, philosophy can be envisioned as the vehicle for sustained critical thought about the important dimensions of adult education…” (Collins, 1986, p. 2).

The educational process can be made more meaningful by understanding one’s educational philosophy (Merriam & Brockett, 1997). “A working philosophy is never completely developed, the ultimate working philosophy never reached” (Apps, 1973, p. 1). The educator’s beliefs about the learner must be developed and analyzed in order to improve his or her working philosophy (Apps, 1973). Philosophical analysis, rather than a scientific analysis, should be used when examining the purposes of adult education (Long, 1983). Educators must understand why and how adults learn in order to be successful. This includes knowing why someone is likely to participate in a program and what barriers a person needs to overcome so that he or she can learn (Merriam & Brockett, 1997). The goal of educators is to teach in such a way that their perceived weak areas become more developed while still employing their strengths (Heimlich & Norland, 1994). “Theory without practice leads to an empty idealism, and action without philosophical reflection leads to mindless activism” (Elias & Merriam, 2005, p. 4). When educators reflect on their teaching style and educational philosophy, they ultimately improve their effectiveness as a teacher (Ferraro, 2000).

An educator decides who and what should be taught. The educator also decides how and for what purpose a concept should be taught (Spurgeon & Moore, 1997). An educator’s philosophy plays a role in how he or she responds to different issues. In this way, philosophy affects both curriculum and instruction (Robinson, 2002). Continuing education is based on the teaching-learning process. Rather than being satisfied with doing the same old thing, adult educators need to examine what they do and why they do it in order to improve their methods and success (Apps, 1985). Educators need to think about how their teaching affects an

individual's development, social and otherwise (Robinson, 2002). Knowles (1951) suggests that having a philosophy of education is a requirement for good teaching. This allows there to be focus on the overall objectives of a program rather than just the short-term goals.

Beliefs deal with what a person considers to be true and factual. Beliefs are expressed descriptively. Values and attitudes influence a person's beliefs. Personal experiences and authority figures are what shape one's beliefs. It has been suggested that a person's educational philosophy is related to his or her philosophy of life. Educators should develop a working philosophy by identifying, analyzing, and classifying their beliefs about education. The educator must evaluate his or her beliefs and those beliefs must support their role as an educator (Spurgeon & Moore, 1997). An adult educator's beliefs influence and affect the entire educational process. Having an educational philosophy allows adult educators to know what they are doing and why they are doing it. This differentiates them from others, such as paraprofessionals, which lack an educational philosophy (Boone, et al., 2002). An educator's personal philosophy affects how he or she works with people. Hiemstra (1991) says that a personal philosophy promotes understanding, flexibility, and consistency in working with adult learners, provides a model for developing and understanding personal values, and makes educators more aware of the needs of their students. By knowing which philosophy he or she mostly relates to, an educator can obtain a more objective understanding and also gain more insights into his or her teaching (White & Brockett, 1987).

People have different philosophies of education, and no philosophy is considered the best. Adult learners need to participate effectively in the classroom and understand that how they are taught is as important as the subject being taught. Adult learners must be responsible for

becoming involved in their own learning (Bergevin, 1967). As Long (1983) pointed out, different educators have different philosophies.

Behavioral

Those that endorse the behavioral theory believe that behavior is a direct result of a person's environment and previous conditioning. The person may not have control over either the environment or the conditioning (Elias & Merriam, 2005). Behavioralists believe that rewarding positive behavior, i.e. learning and performing a new skill, will cause that behavior to happen again. Creating an environment of positive reinforcement is the responsibility of the teacher, and can play a large part in the success of their students (Zinn, 2004). The student plays an active part in the behavioral philosophy. The environment must give students the opportunity to use what they have learned to behave in certain ways. There must be behavior so that it can be positively reinforced. If there is no change in the behavior of the student, then the behavioral philosophy says that learning has not occurred (Elias & Merriam, 2005).

Behavioral teachers and learners focus on the acquisition of new skills. These skills are usually needed to comply with standards set by someone else, such as employers or society. In the behavioral philosophy, information is broken down into smaller pieces or steps. Learners understand each step individually so that they will be prepared for a situation that will be relevant at a later time. For example, most children learn math and English concepts in school that will be used after graduation (Chen, n. d.). Teachers who have this philosophy direct or guide a student's learning. A student's progress is checked regularly, and positive reinforcement is often used (Zinn, 2004). The teacher is also responsible for creating a setting where individual success is not emphasized, nor is competition between individuals (Elias & Merriam, 2005).

Proponents of the behavioral philosophy claim that using behavioral objectives allow learning to be measured precisely and objectively. This can lead to more effective teaching and learning. However, opponents say that teachers should not rely on the behavioral objectives alone. There may be many behaviors that indicate learning has occurred, and the behaviors may be unpredictable. In some cases, information may not need to be broken into pieces or parts, but approached as a whole (Elias & Merriam, 2005).

Liberal

The great teachers Aristotle, Socrates, and Plato employed the liberal philosophy. A liberal education results in wisdom. Educated persons use information and knowledge to acquire this wisdom. People may pursue a liberal education to increase their feeling of self-worth or their competency in a certain area. This has caused the liberal philosophy to endure, and will keep it alive in the future (Elias & Merriam, 2005).

An educator with a liberal philosophy teaches with a pedagogy style; he or she directs the learning process. A liberal teacher uses more traditional methods such as lecture. In this philosophy, teachers are viewed as the authoritative source of knowledge. The educator strives to increase the power of their mind by increasing their knowledge. A liberal learner seeks to understand concepts fully and completely (Zinn, 2004). He or she would use knowledge as a step to move on to a better understanding of the world (Elias & Merriam, 2005).

Progressive

The progressive philosophy "has had a greater impact upon the adult education movement in the United States than any other single school of thought" (Elias & Merriam, 2005, p. 51). A progressive philosophy describes someone who takes an experimental approach to learning or teaching. Both teaching and learning are characterized by a problem solving

approach. This is more of a hands-on approach to learning. Learning information that can be put to practical use is the focus in this philosophy. The teacher directs the learning, but rather than lecturing and simply telling the information, the learner is allowed to put the knowledge to use. Learners directly experience how concepts and information are related. Learners are more qualified in the area in which they have gained new knowledge, and better able to apply it for the good of society (Zinn, 2004).

Trainings in which participants first identify problems based on their experiences, and then solve those problems with new information gained from the training are an example of progressive philosophy (Zinn, 2004). Vocational adult education and Extension education are direct results of the progressive philosophy. These areas are focused on educating the public so they can better their own lives and situations (Elias & Merriam, 2005).

Humanistic

Education has always been important to humanists. Education is how humans better themselves, and it is the human's responsibility to obtain this education. This is a highly personal undertaking (Elias & Merriam, 2005). The humanistic philosophy puts importance on personal growth and self-direction in the learning process. The humanistic learner is highly motivated and takes responsibility in his or her education. The humanistic educator facilitates learning. He or she may allow the students to take responsibility for and direct their learning (Powell, 2006). The educator takes the role as the facilitator of learning by providing opportunities and promoting learning. The use of interactive classroom discussions, group tasks, and team teaching are examples of a humanistic philosophy of education (Zinn, 2004). The student is at the center of learning in the humanistic view. Students decide what they want or need to learn, and the teacher helps them accomplish that objective. The students' motivation comes from them; they want to

learn. The teacher is responsible for creating a setting where learning can occur. Teachers also appreciate and incorporate the experiences of their students in the learning process. In this philosophy, whether learning has occurred is not determined by the teacher, but by the student. The needs of the student, especially the adult learner, must be met by educational activities (Elias & Merriam, 2005).

Educators employing the humanistic philosophy believe in developing the student as a person. They usually tend to concentrate on the affective domains of learning. The goal of a humanistic learner is to become an adaptable person who is a life-long learner. These students strive to become fully functioning individuals that can contribute to the world around them. Humanists tend to believe that humans are good people. They just need a positive, loving environment to develop into that good person (Elias & Merriam, 2005).

Radical

The goal of the radical philosophy of education is to bring about change in current social, economic, and political situations. Education is used to increase the awareness and consciousness of the state of the political and social world (Zinn, 2004). Freire (1970) argues traditional education is a form of violence because the teacher's views and thoughts are forced upon the student. He believes that students should be in charge of their own education, and that education should help them improve their social or political situation. Freire developed his radical theory to teach adults literacy and political conscience. He felt that people can only change their situation when they fully understand it (Elias & Merriam, 2005).

Radical proponents feel that a traditional education does not allow a student to be free. In a traditional education, students are simply given information, learn it, and repeat it back to the teacher (Elias & Merriam, 2005). Those with a radical philosophy see the learner and the teacher

as being equal. The teacher coordinates learning, but the learner is autonomous and responsible for the direction of his or her own learning. In the classroom setting, teachers may often pose problems to their students. Rather than criticize their students and act as an expert on a subject, teachers ask probing, thought-provoking questions. This causes learners to reflect critically on themselves or their part in a situation (Zinn, 2004). Radical teachers may still present views directly to students, but they need to ensure that this is done didactically. The teacher should be responsible for ensuring that a dialogue is maintained between the teacher and the student (Elias & Merriam, 2005).

Philosophy of Adult Education Inventory (PAEI)

The PAEI was developed by Lorraine Zinn (in 1983) to measure the educational philosophy of teachers and learners. This inventory separates educational philosophies into the following categories: liberal, progressive, behaviorist, humanistic, and radical (Zinn, 2004). The PAEI helps identify educators' philosophies and provides information about their beliefs (Holmes & Abington-Cooper, 2000). Zinn (2004) stated that the (PAEI) was "designed to help you, as an adult educator, to begin a process of philosophical inquiry and reflection on your beliefs and actions" (p. 52). The PAEI was used in this study to identify the Extension agents' philosophical orientation.

The PAEI consists of 15 incomplete sentences and five different options for completing those sentences. Beside the five options that complete the sentences there is a 7-point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree with (4) Neutral point. The respondent must circle the number on the scale to represent how he or she feels about each option. There are no right or wrong answers; the participant will simply choose the response that he or she most likely or most frequently does. These responses are the participants' opinions to

determine their educational philosophy, and there is no educational philosophy that is considered to be superior to another (Powell, 2006).

Scores are then transferred onto a scoring sheet and totaled. The highest scores represent the philosophy the participant is most likely to exhibit while teaching. The lowest scores represent the educational philosophy the participant is least likely to practice. A score of 95 to 105 indicates that the participant strongly agrees with that educational philosophy. A score of 15 to 25 is considered a low score and indicates that the participant strongly disagrees with that particular philosophy.

An educator usually has a clear primary philosophical orientation; however, a person can have two philosophies that are stronger than others. Liberal and Behavioral, Progressive and Humanistic, Progressive and Radical, or Humanistic and Radical are combinations of orientations that may be typical for those with two high scoring orientations. If someone scores high in three or more orientations or evenly among all of them, the individual may need to clarify their educational beliefs and values and look for possible contradictions between them (Zinn, 2004).

Teaching Styles

Heimlich and Norland (2002) defined teaching syle as:

> the study of matching teaching beliefs and values - the philosophy of the individual - with the behaviors used in teaching-learning exchange. Style is a means by which we can each seek to be the best we can be in our chosen work of teaching. Perhaps most important, teaching style is the recognition that each teacher is unique, and each can use his or her style to be as effective an educator as possible (p. 23).

Knowles (1951) agreed that the teacher's responsibility is to create learning experiences meaningful to the student. To do this, the teacher uses his or her knowledge of the materials available and the student to guide the student through the learning process. The goal of the teacher is to develop the natural potential of the student (Knowles, 1951). By understanding how adults learn best, learning can be made more effective (Caudron, 2000). The best conditions for students should be developed by educators in order to ensure more effective learning for students (Stitt-Gohdes, 2001).

Teaching styles are different among teachers, and students' learning styles will vary. It is critical that all educators be skilled and vary their teaching style since schools do not attempt to match the styles of learners to styles of teachers. There is no one perfect teaching style and it would be beneficial for the educator to be skilled in more than one style (Turner, 1979). Educators not only need to be aware of different learning styles, but they also need to have many teaching styles available (Brookfield, 1986). An educator's teaching style places certain demands on the learner who may not have the abilities to match such demands. When teachers use only one method of teaching, they are limiting the learning potential of their students (Gregorc, 1979). Teachers may be knowledgeable and hard working in their subject matter area and still not be able to effectively educate students. The educator's teaching style must compliment the student's learning style for effective learning to take place. Teachers believe their particular learning style is best and encourage everyone to learn in that way. An educator's teaching style influences the programs, methods, and other resources he or she uses in an educational setting. There are many teaching styles, and no one style is better or worse than another. They may all be appropriate at one time or another. Teaching style is continuously being developed as more teaching experiences occur (Heimlich & Norland, 1994). According to Dunn and Dunn (1979), when

learning and teaching styles complement each other there is significant improvement in student achievement and motivation.

People learn in different ways, and some students only learn through selected teaching methods. The same teaching method that produces excellent results for one student may not work for another. Many experienced teachers understand this and yet continue to teach with the same style to the entire class (Dunn & Dunn, 1979). Although they should have many teaching methods at their disposal, teachers should be able to use the teaching methods that best suit the needs of the learner. The teacher may, and often should, incorporate more than one teaching method (Knowles, 1951). Standardized approaches to teaching and learning are usually not considered when one realizes that learners all have different personalities, learning styles, and experiences (Brookfield, 1986). Although lecture is a commonly used teaching style, it is not always the way adults prefer to learn (Cross, 1981). Adults learn best through personal experience, group support, or mentoring, even though most adult education is in the classroom and is instructor-led (Caudron, 2000). Most adult educators do not have a background in adult learning theory. Many educators teach the way they were taught, which is not usually the way adults learn best. They usually lecture at the front of a classroom, and adults may not have the patience or time to learn this way (Caudron, 2000). Fischer and Fischer (1979) stated that "teachers must be willing to examine and to alter their teaching styles if evidence or the judgment of other professionals warrants such change" (p. 254). Most teachers have a teaching style that falls somewhere on a spectrum between teacher-centered and learner-centered (Gomberg & Gray, 2001).

Teachers' learning styles influence their teaching styles. Their teaching style is related to how they perceive learning occurs, and they tend to become frustrated when their teaching style

is ineffective (Seaman & Fellenz, 1989). Stitt-Gohdes (2003) agrees that educators predominantly teach the way they learn. This means that educators not only need to understand their own learning styles, but also the learning styles of their students to be more successful. Proper and suitable instruction can be accomplished by identifying the learning style preferences of students and using this in the educational process (Stitt-Gohdes, 2003). Educators need to select teaching strategies that are best for the learner. To accomplish this, adult educators need to comprehend the motivations and characteristics of adult learners (Seaman & Fellenz, 1989).

Learner-Centered Teaching

The main focus of learner-centered teaching is the learner. The teacher must focus on the individual needs, interests, and perspectives of the student (McCombs & Miller, 2007). The learner-centered educator assumes that students want to learn, are naturally good, and the possibility of a student's educational growth is endless. The teacher in the learner-centered approach focuses on the student rather than the information to be taught. The educational material is presented in a way that is helpful to the student. Students are motivated by their attempt to improve their lives or simply by their interest in a subject. They are often incorporated in the lessons taught by the teacher. The teacher is available to help the student, but the student takes responsibility for his or her learning. Trust between the student and teacher is important in this style of teaching. Learning is assessed by the student's self-evaluation and practical, useful feedback from others (Conti, 2004). It is necessary for adult learners to identify the student's educational needs, and the adult educator plays an important role in this identification (Kerka, 2002). "With the help of the adult educator, the adult learner can become an effective self-directed learner or self-teacher" (Tisdale & Taylor, 1999, p. 8). In the student-centered approach, educators view themselves as facilitators who are resources for learning. The student bears as

much responsibility for the direction and method of learning as the educator (Brookfield, 1986). Literature supports the use of a learner-centered approach for educating adults. Adults are not children. They are mature and independent individuals, and need to be recognized as such (Seaman & Fellenz, 1989).

Teachers who are learner-centered understand that, like their students, they are learners also (McCombs & Miller, 2007). However, our past history influences our teaching practices as adult educators (Apps, 1985). These teachers understand that everyone needs to be a lifelong learner. When teachers are learner-centered, they are able to identify what subject matter they want their students to learn. They can also identify and use the best methods to achieve these objectives even when their students have diverse interests and needs (McCombs & Miller, 2007). Adults have many life experiences, and they can relate these experiences to their learning activities. Teachers should try to incorporate these life experiences in their lessons to encourage learning (Kennedy, 2003).

Alton and Trombly (as cited in Brown, 2003b, p. 49) say that learner-centered teaching is "a model for countering classroom challenges because of its viability for meeting diverse needs." Learner-centered environments respect the students' learning needs, strategies, and styles by placing students at the center of the classroom organization. Learner-centered teachers develop teaching methods that address diverse learner needs and perspectives (McCombs & Miller, 2007). McCombs (as cited in Brown, 2003b) suggests that heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs are the focus of a learner-centered approach to education. The educator has the responsibility of creating an environment where students can make learning connections. The learner's needs are more of a priority than the knowledge of

facts and skills. More importance is put on learning for understanding and thinking (Brown, 2003b).

The goal of the learner-centered educator should be to motivate students to think about the content they are learning. Since the instructor's job is to motivate thinking, the teacher's expertise is a critical part of student learning (Brown, 2003b). Nuckels (2000) suggests that

> being student-centered is more of an attitude than an activity…. Student-centered then is the total orientation of the teacher to the learner. This includes the teacher's attitudes, behaviors, beliefs, and values system. The need for individualizing instruction, is a recognition of the belief that leaners differ in all respects: intellectual, cognitive, affective, and situational (p. 5).

Thompson, Licklider, and Jungst (2003) also assert that:

> Effective learner-centered teaching strategies, then, should contribute to the breadth and depth of content knowledge, assist students in learning how to organize knowledge around major concepts and principles, enhance retention and retrieval, and contribute to student development of metacognitive abilities, among other things (p. 135).

Adults expect to immediately apply their newly acquired knowledge from their learning experiences. Oftentimes, youth do not expect to apply what they have learned until later in life. For the best possible learning to occur, the adult educator needs to ensure that students perceive some immediate applications of what they are learning (Kennedy, 2003). Daley (2003) noted that:

> Creating learner-centered approaches to teacher development will require attention to learning orientation, teaching orientation, and career stage of educators. The power in these learner-centered approaches is that they help develop the ability

to learn from experiences, to integrate knowledge, and to think reflectively (p. 29). Educators need to provide learning situations that are conducive for students in order for the student to reach higher standards and learn more effectively (Brown, 2003a).

According to a large portion of adult education literature, the most effective style for teaching adults is the collaborative mode (Conti, 1982, 1983). The collaborative mode is used to help adults learn (Conti, 1983). The collaborative mode signifies a learner-centered method of instruction in which the educator and the learner shares the forming of the educational curriculum (Conti, 1982). Conti (1983) stated that in the collaborative model, the curriculum should be centered on the needs of the learner, and the topics covered should be related to the learner's previous experiences. The learner needs to be able to immediately apply the concepts to problems directly affecting them. This model assumes that adults are self-directed and problem-centered and that the teacher is simply a facilitator of learning. A supportive environment for learning should be created by the teacher (Conti, 1983). According to Conti (1985), adult education literature supports the concepts that the educational curriculum should be learner-centered, learning activities should be related to the learner's experience, adults are self-directed, the learner should be involved in entrance and exit assessments, adults are problem-centered, and the teacher should function as the facilitator. The educator's responsibility is to organize and maintain an environment which facilitates student learning. The learner and the educator are partners in the educational process. It is assumed that the learner takes responsibility for his or her own education by seeking increased self-direction (Conti, 1985). The curriculum is not pre-determined by the educator, it is built around the specific problems and life situations of the learner. The student's needs are the main and driving force behind the curriculum (Conti, 1983). Active student participation is very important in this learner-centered style. The adult student is

involved in diagnosing educational needs, setting educational goals, and evaluating the educational outcome of the learning event. Learning activities are related to life experiences. For the collaborative model, the previous experiences of the learner are stressed so that the learner is engaged (Conti, 1983). An adult student's life experiences serve as a resource for learning and can inspire active participation in learning (Conti, 1985). The key to the collaborative model being successful is participation of both the teacher and the student (Conti, 1983).

Teacher-Centered Teaching

Teacher-centered teaching is the major teaching style expressed by most educators in North America. Proponents of this style believe the students are passive and become active by reacting to stimuli in the environment (Conti, 2004). Traditional classrooms have students receiving information and knowledge from the teacher. Students are told by the teacher what is important and what they need to learn. The students have no say in what they are taught (Kerka, 2002). The educator's responsibility is to plan or provide an environment which encourages the desired behavior and discourages the undesirable behavior of the student. The environment is set up to control the student, and eventually the student is conditioned to give the appropriate response at the appropriate time. Students are motivated by their prior conditioning, or by their own basic drive or emotions from within. With the teacher-centered approach, learning is defined as a change in behavior. Objectives are set up in order to determine if a behavior change has occurred. The behavior change of the student is measured by some type of competency test after completing the educational activity. This type of competency test can measure how well the student learned as well as how proficient the educator was at teaching (Conti, 2004). Over time, the assumption has been made that teacher-centered learning is appropriate for children and adolescents but not adults (Kerka, 2002).

The teacher-centered approach is the transmission of knowledge by making the teacher the one who controls what is learned. The predominant instructional practice with the teacher-centered approach is the direct instructional method. Teachers do not ask open ended questions or leave time for students to work on problem-based projects due to strict schedules. The student's involvement in classroom discussions consists of a response to a teacher's direct question. Thinking is done by the teacher, and the student's responsibility is to memorize and recite the information given by the teacher (Brown, 2003b).

Principles of Adult Learning Scale (PALS)

The PALS was developed by Gary Conti in 1978 in order to determine the teaching styles of adult educators. Regardless of the subject content, an educator's teaching style is the distinct quality he or she consistently possesses as he or she teaches. Teaching styles can not be determined by observing one solitary action of the educator (Conti, 2004). According to Brown (2003a), the way in which a teacher learned concepts has a great effect on the teaching style he or she uses. After taking the PALS instrument, educators should reflect on the implications that style has in the classroom. The PALS instrument divides teaching styles into two categories: learner-centered teaching and teacher-centered teaching. The Principles of Adult Learning Scale (PALS) was used to identify the Extension agents' teaching styles as teacher-centered or learner-centered.

The PALS is designed to determine the frequency an adult educator practices a particular teaching style. The PALS consists of 44 items that contain certain things that an adult educator might do in a classroom. The participant must read each statement and respond as to how frequently he or she does that item on a 6-point Likert scale ranging from 0 to 5 (0= Always, 1= Almost always, 2= Often, 3=Seldom, 4=Almost never, 5=Never). The lowest possible score on

PALS is 0, and the highest possible score is 220. The teaching style of the educator and how strong that style is can be determined by comparing the educator's score to 146. A learner-centered approach is indicated by a score higher than 146 on PALS, and a score lower than 146 indicates a teacher-centered approach. The further scores are from 146 indicate a stronger commitment to a particular style. It is possible to have middle-range scores indicating the educator exhibits a learner-centered as well as a teacher-centered approach to teaching.

The PALS score can also be divided into seven factors; these factors are Learner-Centered Activities, Personalizing Instruction, Relating to Experience, Assessing Student Needs, Climate Building, Participation in the Learning Process, and Flexibility for Personal Development. High scores in a factor shows support of the learner-centered concept and low scores for a factor shows support of the teacher-centered concept.

Findings Using Both the PAEI and the PALS

Williams (1999) conducted a study using the Philosophy of Adult Education Inventory to determine the educational philosophies of the University of Florida Cooperative Extension Agents. Williams looked at the program areas of agriculture, family and consumer science, 4-H and youth development, natural resources, sea grant, and energy. The natural resources, sea grant, and energy groups had few agents, therefore these three groups were combined. After an analysis of the Philosophy of Adult Education Inventory, Williams found that the preferred philosophy from all the program areas was progressive. The second preferred philosophy was behavioral for the agriculture and consumer science program area agents. The humanistic orientation was the second preferred philosophy for the 4-H and youth development agents and the combined group of natural resources, sea grant, and energy agents.

Powell (2006) conducted a study using the Philosophy of Adult Education Inventory to determine the educational philosophies of workforce education and entrepreneurship instructors within the state of Alabama. In this study, the data collected was separated into that from the entrepreneurship instructors and that from the workforce education instructors. Of the entrepreneurship instructors, most identified with the progressive philosophy while the rest identified with the behavioral philosophy. Of the workforce education instructors, the preferred philosophies were 49% behavioral, 42% progressive, 5% humanistic, 3% liberal, and 1% radical. There were no participants that strongly disagreed with any of the philosophies.

Floyd (2010) conducted a study using the Philosophy of Adult Education Inventory to determine the educational philosophies of workforce education and entrepreneurship instructors within the state of Georgia. The data collected from the entrepreneurship instructors and the workforce education instructors were combined to find the results of this study. For the most part, the participants scored in the neutral range on all the teaching philosophies, but there were some high tendencies. The participants scored highest on progressive orientation followed by behavioral. The participants' lowest scores were on the humanistic orientation followed by the radical orientation. When workforce education and entrepreneurship instructors are looked at separately, the workforce educators had higher mean scores across all five orientations.

Williams (1999) conducted a study using the Principles of Adult Learning Scale to determine the educational philosophies of the University of Florida Cooperative Extension Agents. In this study, Williams looked at the program areas of agriculture, family and consumer science, 4-H and youth development, natural resources, sea grant, and energy. The natural resources, sea grant, and energy groups had few agents, therefore these three groups were combined. After an analysis of the Principles of the Adult Learning Scale Philosophy, Williams

found that none of the program areas achieved a score that supports a learner-centered teaching approach. Learner-centered activities was the only one of Conti's seven factors of a learner-centered teaching approach (learner-centered activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process, and flexibility for personal development) in which the groups scored above the norm mean.

Powell (2006) conducted a study using the Principles of Adult Learning Scale to determine the teaching styles of workforce education and entrepreneurship instructors within the state of Alabama. Powell found that both the workforce education instructors and the entrepreneurship instructors preferred a teacher-centered approach. Personalizing instruction and assessing student needs are the only two of Conti's seven factors on which the group scored above the norm mean.

Floyd (2010) conducted a study using the Principles of Adult Learning Scale to determine the teaching styles of workforce education and entrepreneurship instructors within the state of Georgia. The results of the statistical analysis show that on average the workforce education and entrepreneurship instructors were teacher-centered. Still, some scores were highly learner-centered. Of Conti's seven factors of a learner-centered teaching approach, the learner-centered activities had an average score a little higher than the other factors. Scores in the areas of flexibility for personal development and personalizing instruction were the second and third highest, respectively.

Summary

The literature review has provided a general idea of the previous research related to this study. There are five educational philosophies as determined by Elias and Merriam (2005): behavioral, humanistic, liberal, progressive, and radical. There is no right or wrong educational

philosophy, and it is common for an educator to exhibit more than one educational philosophy. The Philosophy of Adult Education Inventory is a valid and reliable instrument that has been developed to help educators determine where they fall on the spectrum of educational philosophies (Zinn, 2004).

According to Conti (2004), an educator's teaching style is closely related to their educational philosophy. An educator possesses either more learner-centered or more teacher-centered qualities. Although, they may have characteristics of each, an educator will tend to favor one teaching style or the other. The Principles of Adult Learning Scale is an instrument that many researchers use to identify the teaching style of educators.

Chapter 3

Methods

Introduction

The purpose of this study was to identify the individual educational philosophies and teaching styles of Extension Agents in ACES using the Philosophy of Adult Education Inventory (PAEI) and Principles of Adult Learning Scale (PALS) instruments. The study also examined the relationship between the educational philosophies and teaching styles of extension agents and their respective subject matter areas. The following research questions were addressed:

1. What are the educational philosophies of Extension Agents in the Alabama Cooperative Extension System using Zinn's Philosophy of Adult Education Inventory (PAEI)?
2. What are the teaching styles of Extension Agents in the Alabama Cooperative Extension System using Conti's Principles of Adult Learning Scale (PALS)?
3. What is the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development?

Design

A survey collects data through a process of asking people questions. This data is used to quantitatively describe the sample in a study (Creswell, 1994). Surveys are valuable tools used to gather information about people's opinions and behaviors, and they have proven to be very efficient for more than 70 years (Dillman, Smyth, & Christian, 2009). The PAEI and the PALS were developed for measuring the philosophies and teaching styles of adults, therefore they will work well for surveying agents in the Alabama Cooperative Extension System. The PAEI and PALS are easily administered online in an Internet format (Floyd, 2010).

In this study, data were collected using a web-based survey. The completion rate for web-based surveys is greater than that of paper-based surveys. In addition, web-based surveys are easier and take less time to prepare and deliver than paper-based surveys. Collecting and analyzing results are also made simpler with web-based surveys (Potvin, 2007). Internet-based surveys allow researchers to gather data efficiently. These Web-based surveys do not cost as much as traditional surveys, and they can be more appealing to respondents which can encourage them to complete the survey (Berends, 2006). Internet surveys allow results to be reported faster than traditional survey methods and with less cost to the researcher (Dillman, et al, 2009; Lazar & Preece, 1999). Additionally, when an Internet survey is used, errors due to entering data are eliminated (Lazar & Preece, 1999). E-mail has become a popular method of communication versus the telephone and postal mail. Thus, Internet surveys have become more practical for researchers (Dillman, et al, 2009).

The data in this study was collected through SurveyMonkey. SurveyMonkey is a reliable and powerful tool for collecting and analyzing data. It also produces user-friendly and attractive surveys (Potvin, 2007). For internet surveys to be effective, prospective respondents need to have

access to the Internet if an Internet survey is used (Lazar & Preece, 1999). All of the respondents in this study had access to the Internet.

Population

The participants in this study were all Extension Agents in the Alabama Cooperative Extension System that work in the 67 counties of Alabama. These agents spend most of their time working in one of five specific program areas including agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development. The survey was emailed directly to all Agent Assistants, County Agents, Regional Agents, Urban Agents, and County Coordinators, totaling 300 people.

The researcher selected recipients based on the qualification of being an agent in the Alabama Cooperative Extension System. Providing the survey to a select group increases the accuracy of the results of the study because the participants were not randomly selected (Potvin, 2007). Comprehensive sampling was used in this study. Wiersma and Jurs (2009) define comprehensive sampling as including "all units with specified characteristics in the sample" (p. 343).

Philosophy of Adult Education Inventory (PAEI)

The PAEI consists of 15 incomplete sentences and five different options for completing those sentences. Beside the 5 options that complete the sentences there is a 7-point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree with (4) Neutral point. The respondent must circle the number on the scale to represent how he or she feels about each option. There are no right or wrong answers; the participant will simply choose the response that he or she most likely or most frequently does (Powell, 2006; Zinn, 2004).

Scores are then transferred onto a scoring sheet and totaled. The highest scores represent the philosophy the participant is most likely to exhibit while teaching. The lowest scores represent the educational philosophy the participant is least likely to practice. A score of 95 to 105 indicates that the participant strongly agrees with that educational philosophy. A score of 15 to 25 is considered a low score and indicates that the participant strongly disagrees with that particular philosophy (Zinn, 2004).

An educator usually has a clear primary philosophical orientation; however, a person can have two philosophies that are stronger than others. If someone scores high in three or more orientations or evenly among all of them, the individual may need to clarify their educational beliefs and values and look for possible contradictions between them (Zinn, 2004).

Validity of PAEI

According to Borg and Gall (1989), validity is defined as "the degree to which a test measures what it purports to measure" (p.249-250). However, more than one kind of test validity exists. Internal validity pertains to how accurately the results of a study are interpreted, while external validity relates to how well the results of a study can be generalized to a population (Wiersma & Jurs, 2009). Zinn (1983) gives a description of the validation process of the PAEI:

> Test data were analyzed to determine the extent to which each of the variables (i.e., response options) on each of the scales (L, B, P, H, R) was a measure of one or more of the factors underlying the scale. Coefficients were calculated and presented in a rotated matrix for each of the scales, yielding between 21 (R scale) and 25 (B, P, and H scales) variables with significant factor loadings. The conclusion drawn from these data was that all of the response options on the Inventory were significant measures of at least one of

the factors on each scale and thus, none of the individual variables or items could be eliminated without making other modifications and retesting for validity (p. 150).

Zinn (1983) chose a panel of judges that were familiar with the area of adult education as well as the philosophies of adult education as described by Elias and Merriam to determine the validity of the PAEI. This panel rated how well the response options of the PAEI represented each philosophy. The panel's mean average ratings were used to determine the content validity of the instrument. Zinn and the panel agreed that 97% of the response options represented the proper philosophies (Zinn, 1983). Thus, Zinn concluded that the PAEI meets the criteria for content validity. Due to Zinn's research, the PAEI is recognized as a valid instrument that can reveal an educator's personal educational philosophy.

Reliability of the PAEI

Reliability is defined as "the replicability and consistency of the methods, conditions, and results" (Wiersma & Jurs, 2009, p. 10). If an instrument is reliable, then it measures the same variable consistently. Studies that are reliable have procedures and findings that can be reproduced (Wiersma & Jurs, 2009).

A diverse group of adult educators were used to test the reliability, as well as the validity, of the PAEI. Of the individual response options on the instrument, 93% of them correlated significantly with the philosophy they were intended to measure. According to Zinn (1983), the field test scores for this instrument indicated an appropriate philosophy for each respondent that the respondent agreed represented them. These field tests also produced results that were indicative of the respondents' educational philosophies.

Principles of Adult Learning Scale (PALS)

The PALS is designed to determine the frequency an adult educator practices a particular teaching style. The PALS consists of 44 items that contain certain things that an adult educator might do in a classroom. The participant must read each statement and respond as to how frequently he or she does that item on a 6-point Likert scale ranging from 0 to 5 (0= Always, 1= Almost always, 2= Often, 3=Seldom, 4=Almost never, 5=Never). The lowest possible score on PALS is 0, and the highest possible score is 220. The teaching style of the educator and how strong that style is can be determined by comparing the educator's score to 146. A learner-centered approach is indicated by a score higher than 146 on the PALS, and a score lower than 146 indicates a teacher-centered approach. The further scores are from 146 indicate a stronger commitment to a particular style. It is possible to have middle-range scores indicating the educator exhibits a learner-centered as well as a teacher-centered approach to teaching (Conti, 2004).

The PALS score can also be divided into seven factors, these factors are Learner-Centered Activities, Personalizing Instruction, Relating to Experience, Assessing Student Needs, Climate Building, Participation in the Learning Process, and Flexibility for Personal Development. High scores in a factor shows support of the learner-centered concept and low scores for a factor shows support of the teacher-centered concept (Conti, 2004).

Validity of PALS

Two juries of adult educators were used to establish the construct validity of items on the PALS. One jury was made up of three adult education professors from Northern Illinois

University, and the second jury was made up of ten adult education professors from different areas of the country and with different philosophical orientations. These jurors were asked to determine if the concept of each item was compatible with adult education learning principles associated with the collaborative mode. At least 78% of the jurors agreed that the items were compatible, thus establishing construct validity. Field tests with adult basic education practitioners in full-time public school programs in Illinois verified the content validity of PALS. Comparing scores on the PALS to the Flanders Interaction Analysis Categories produced statistically high correlations. This verified that the PALS is able to consistently differentiate among educators with divergent philosophical views (Conti, 1982).

Reliability of PALS

The test-retest method of the final 44-item form of the PALS was used to confirm reliability of the instrument. The Pearson correlation gave a reliability coefficient of 0.92. This result indicates that the PALS is reliable for measuring the degree of an adult educator's support of the collaborative mode (Conti, 1982).

Procedures

A cross-sectional design was used in this study. In a cross-sectional design, data is collected at one time, as opposed to a longitudinal study where data is collected over a period of time (Wiersma & Jurs, 2009). Surveys are generally used to "determine the opinions, attitudes, preferences, and perceptions of persons of interest to the researcher" (Borg, Gall, & Gall, 1993, p. 219). Identifying the preferences of Extension agents in their teaching style and philosophy was the goal of this study, therefore the cross-sectional survey design was used.

For this study, one 75 question and one 44 question survey was developed. The questions were loaded into a survey designer on the Internet and web links were e-mailed to prospective respondents. An invitation e-mail was sent to all Extension Agents in the Alabama Cooperative Extension System. An inform and consent letter and survey directions were attached to the invitation e-mail. A web-link was embedded in the invitation e-mail as a hyperlink.

E-mails containing links to the two surveys on SurveyMonkey were sent to 300 prospective participants. Information was transmitted via the Internet through Secure Socket Layer (SSL). SSL is supported on all modern web browsers. Data were collected and downloaded using SSL encryption. Several follow up e-mails were sent prior to the closing of the survey.

Variables

The independent variable in this study was the program areas in which the Extension Agents work. The only demographic data collected were the length of employment of each agent. The program areas were grouped together and analyzed in SPSS.

The dependent variable was the Extension Agent's philosophical orientation which was determined by the PAEI. The numerical score for each of the philosophies - liberal, progressive, behavioral, humanistic, and radical - was entered into SPSS and attached to the appropriate program area.

Another dependent variable was each Extension Agent's teaching style, which was established using the PALS. There were also seven different aspects of the teaching style measured with the PALS. The responses to the 44 items on the instrument were totaled. The sum was compared to the established mean of 146. This indicated the Extension Agent's preference

for teacher- or learner-centered styles. The responses to the items about the seven aspects of the teaching style were also totaled and compared to established means.

Data Analysis

Descriptive statistics were used to determine the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture; forestry, wildlife and natural resources; family and consumer sciences; economic and community development; and 4-H and youth development. The results from the surveys were separated into the five program areas. The mean, standard deviation, minimum score, and maximum score were calculated and identified for the entire sample on quantitative responses. Statistically significant differences between philosophical orientations and teaching styles were calculated using inferential statistics. The data were also interpreted using graphical techniques, including scatter plots and bar graphs. Frequencies were used to summarize the results of qualitative variables. All statistical procedures were performed at the $p \leq .05$ level.

Summary

Two survey instruments were e-mailed to 300 Extension Agents in ACES for a study on teaching styles and philosophies. A total of 70 participants responded to the survey (23.3%).

The PAEI is a questionnaire that reports the educational philosophies of adult educators. These educational philosophies are behavioral, liberal, progressive, humanistic, and radical. The PALS identifies how often an educator practices a teacher-centered or learner-centered approach while teaching. Literature indicates that an educator's philosophy impacts his or her teaching

style. Therefore, this study attempted to determine the relationships within agents of the Alabama Cooperative Extension System.

Chapter 4

Results

The purpose of this study was to identify the individual educational philosophies and teaching styles of Extension Agents in ACES using the Philosophy of Adult Education Inventory (PAEI) and Principles of Adult Learning Scale (PALS) instruments. The study also examined the relationship between the educational philosophies and teaching styles of Extension Agents and their respective subject matter areas. The following research questions were addressed:

1. What are the educational philosophies of Extension Agents in the Alabama Cooperative Extension System using Zinn's Philosophy of Adult Education Inventory (PAEI)?
2. What are the teaching styles of Extension Agents in the Alabama Cooperative Extension System using Conti's Principles of Adult Learning Scale (PALS)?
3. What is the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development?

This study examined the educational philosophies and teaching styles of Extension Agents in the Alabama Cooperative Extension System. E-mails containing a link to the two surveys on SurveyMonkey were sent to 300 prospective participants. A total of 70 participants responded to

the survey (23.3%). However, one participant did not declare an area of concentration. Therefore, only 69 surveys were examined.

Of the completed surveys, 27 were agriculture agents (39.1%), 10 were forestry, wildlife and natural resources agents (14.5%), 15 were family and consumer science agents (21.7%), 5 were economic and community development agents (7.2%), and 12 were 4-H and youth development agents (17.4%).

PAEI

The PAEI consists of 15 incomplete sentences and five different options for completing those sentences. Beside the 5 options that complete the sentences there is a 7-point Likert scale ranging from (1) Strongly disagree to (7) Strongly agree with (4) Neutral point. The respondent must circle the number on the scale to represent how they feel about each option. There are no right or wrong answers; the participant will simply choose the response that they most likely or most frequently do (Powell, 2006; Zinn, 2004).

Scores are then transferred onto a scoring sheet and totaled. The highest scores represent the philosophy the participant is most likely to exhibit while teaching. The lowest scores represent the educational philosophy the participant is least likely to practice. A score of 95 to 105 indicates that the participant strongly agrees with that educational philosophy. A score of 15 to 25 is considered a low score and indicates that the participant strongly disagrees with that particular philosophy (Zinn, 2004).

This questionnaire study consists mainly of descriptive statistics that investigate the philosophical beliefs of agents in the Alabama Cooperative Extension System. The mean score, standard deviation, and range were calculated for each philosophy (L = Liberal, B = Behavioral, P = Progressive, H = Humanistic, R = Radical) (see Table 1).

Table 1

Overview of PAEI Scores for All Agents

	L	B	P	H	R
Mean	75.87	79.68	83.25	74.23	69.00
N	62	66	64	64	65
Standard Deviation	12.10	12.63	13.76	12.34	13.70
Minimum	32	33	29	30	30
Maximum	99	98	100	99	96
Range	67	65	71	69	66

Of the 69 surveys that were completed, 27 were agriculture agents (39.1%). After the survey instruments were scored, there was a range of 16 points between the means: 75.96 (liberal), 77.65 (behavioral), 83 (progressive), 73.76 (humanistic), and 67.33 (radical) (see Table 2).

Table 2

Overview of PAEI Scores for Agriculture Agents

	L	B	P	H	R
Mean	75.96	77.65	83.00	73.76	67.33
N	26	26	27	25	27
Standard Deviation	13.15	14.60	16.13	13.53	13.64
Minimum	32	33	30	30	30
Maximum	97	98	98	98	87
Range	65	65	68	68	57

Of the 27 agriculture agents that completed the survey instrument, 17 identified with the progressive philosophy (63%). There were 4 agriculture agents that identified with the behavioral philosophy (14.8%), 3 of the agriculture agents identified with the humanistic philosophy (11.1%), and 2 agriculture agents identified with the liberal philosophy (7.4%). There was one agent that identified with the radical philosophy (3.7%). One agriculture agent identified with both the progressive and humanistic philosophies (see Table 3).

Table 3

Individual PAEI Scores for Agriculture Agents

Participant #	L	B	P	H	R
1	79	75	84	63	52
2	84	78	81	77	76
3	77	77	84	67	68
4	32	33	30	30	30
5	82	78	79	72	71
6	90	95	93		87
7	63	67	71	69	57
8	70	65	81	73	62
9	65		80	71	65
10	89	97	98	75	78
11	67	62	80	64	53
12	97	98	95	92	82
13	68	70	91	82	75

Table 3 (continued)

Participant #	L	B	P	H	R
14	73	79	80	87	73
15	78	81	79	68	48
16	81	80	96	90	80
17	85	86	91	72	58
18	80	85	97	98	79
19	68	71	76	60	66
20		46	36		61
21	84	89	92	92	81
22	72	86	91	76	69
23	80	87	95	77	85
24	57	81	89	71	51
25	76	79	87	64	68
26	87	87	91	72	58
27	91	87	94	82	85
Mean	75.96	77.65	83.00	73.76	67.33

There were 10 forestry, wildlife, and natural resources agents that completed the survey instrument (14.5%). After scoring, there was an 18.8 point range between the means: 75.44 (liberal), 79.7 (behavioral), 81.22 (progressive), 72.4 (humanistic), and 62.4 (radical) (see Table 4).

Table 4

Overview of PAEI Scores for Forestry, Wildlife, and Natural Resources Agents

	L	B	P	H	R
Mean	75.44	79.70	81.22	72.40	62.40
N	9	10	9	10	10
Standard Deviation	4.77	4.81	6.06	8.50	10.42
Minimum	68	73	75	55	47
Maximum	81	87	91	84	78
Range	13	14	16	29	31

Of the 10 forestry, wildlife, and natural resources agents that completed the survey, and 6 identified with the progressive philosophy (60%). There were 2 agents that identified with the behavioral philosophy (20%). One agent identified with both liberal and progressive philosophies, and one agent identified with both liberal and behavioral philosophies (see Table 5).

Table 5

Individual PAEI Scores for Forestry, Wildlife, and Natural Resources Agents

Participant #	L	B	P	H	R
1		87		71	72
2	68	73	77	76	68
3	74	79	84	55	49
4	69	79	80	79	63

Table 5 (continued)

Participant #	L	B	P	H	R
5	76	75	76	66	63
6	80	80	76	78	53
7	81	75	82	68	47
8	73	79	75	68	59
9	79	87	90	84	78
10	79	83	91	79	72
Mean	73.50	82.55	85.91	74.64	74.20

Of the 69 participants in this study, 15 were family and consumer science agents (21.7%). Once the survey instruments were scored, there was an 11.3 point range between the means for these agents: 81.29 (liberal), 85 (behavioral), 88 (progressive), 80.14 (humanistic), and 76.67 (radical) (see Table 6).

Table 6

Overview of PAEI Scores for Family and Consumer Science Agents

	L	B	P	H	R
Mean	81.29	85	88	80.14	76.67
N	14	15	13	14	15
Standard Deviation	9.72	8.01	7.35	10.45	13.66
Minimum	68	71	73	66	55
Maximum	99	96	100	99	96
Range	31	25	27	33	41

Of the 15 family and consumer science agents that completed the survey, 6 identified with the progressive philosophy (40%) and 6 identified with the behavioral philosophy (40%). There were 2 agents that identified with the liberal philosophy (13.3%), and one agent that identified with the humanistic philosophy (6.7%) (see Table 7).

Table 7

Individual PAEI Scores for Family and Consumer Science Agents

Participant #	L	B	P	H	R
1	69	71	73	71	69
2	83	91	93		96
3	68	73		69	67
4	86	83	84	84	82
5	79	85		83	75
6	77	86	85	73	75
7	84	91	89	89	69
8	86	95	92	84	81
9	94	86	100	99	95
10	99	96	97	95	94
11	87	95	93	66	87
12	71	80	87	70	63
13	87	87	86	88	87
14	68	82	87	81	55
15		74	78	70	55
Mean	81.29	85.00	88.00	80.14	76.67

Although 5 agents that participated in the survey declared themselves economic and community development agents, there were only 4 economic and community development agents (5.8%) that completed the PAEI survey instrument out of the 69 total participants. One agent declared their area as economic and community development, but did not answer any questions on the PAEI instrument. There was a 16.4 point range between the means: 59 (liberal), 65 (behavioral), 66.75 (progressive), 60 (humanistic), and 50.33 (radical) (see Table 8).

Table 8

Overall PAEI Scores for Economic and Community Development Agents

	L	B	P	H	R
Mean	59.00	65.00	66.75	60.00	50.33
N	3	4	4	4	3
Standard Deviation	25.06	24.94	25.75	17.66	9.81
Minimum	35	36	29	36	39
Maximum	85	90	87	76	56
Range	50	54	58	40	17

Of the 4 economic and community development agents, one agent identified with the liberal philosophy (25%) and one agent identified with the behavioral philosophy (25%). There was one agent that identified with both the behavioral and the humanistic philosophy. Another agent identified with both the progressive and humanistic philosophy (see Table 9).

Table 9

Individual PAEI Scores for Economic and Community Development Agents

Participant #	L	B	P	H	R
1	35	36	29	36	29
2	85	81	75	58	56
3		90	87	70	
4	57	53	76	76	56
Mean	59.00	65.00	66.75	60.00	50.33

Of the 69 participants in the survey, 12 stated they were 4-H and youth development agents. One of these agents, however, did not answer any questions on the PAEI instrument. Only 11 4-H and youth development agents, then were counted (15.9%). After scoring the survey instrument, there was a 12.4 point range between the means: 73.5 (liberal), 82.55 (behavioral), 85.91 (progressive), 74.6 (humanistic), and 74.2 (radical) (see Table 10).

Table 10

Overview of PAEI Scores for 4-H and Youth Development Agents

	L	B	P	H	R
Mean	73.50	82.55	85.91	74.64	74.20
N	10	11	11	11	10
Standard Deviation	8.29	7.67	8.50	9.28	8.74
Minimum	58	74	73	65	62
Maximum	85	97	100	90	88
Range	27	23	27	25	26

Of the 11 4-H and youth development agents, there were 5 that identified with the progressive philosophy (45.5%). Four of these agents identified with the behavioral philosophy (36.4%). One agent identified with the humanistic philosophy (9.1%), and one agent identified with both the liberal and behavioral philosophies (see Table 11).

Table 11

Individual PAEI Scores for 4-H and Youth Development Agents

Participant #	L	B	P	H	R
1	85	88	86	87	86
2	77	82	81	65	68
3	74	74	73	68	67
4		80	81	70	80
5	58	77	93	72	67
6	76	76	91	67	71
7	75	81	74	72	62
8	83	93	100	90	88
9	62	74	82	86	74
10	72	86	93	65	
11	73	97	91	79	79
Mean	73.50	82.55	85.91	74.64	74.20

Of all the Extension agents completing the survey instrument, the progressive philosophy was agreed with the most. There were 61 agents agreeing or strongly agreeing with the progressive philosophy, while only 3 disagreed with the progressive philosophy. Several agents

(60) also agreed or strongly agreed with the behavioral philosophy. Agents only identified with one philosophy in most cases, however several agents agreed with more than one philosophy, which is not uncommon according to Zinn (2004). A majority of the agents participating in this survey agreed with all of the philosophies, which is also indicated by the mean scores for each philosophy found in Table 1. The philosophy that most agents (24) disagreed with or were neutral toward was the radical philosophy (see Table 12).

Table 12

Distribution of PAEI Scores According to Philosophical Agreement for All Agents

Scores	L	B	P	H	R
Strong Agreement 95-105	2	7	8	3	2
Agreement 66-94	52	53	53	51	39
Neutral 56-65	6	2	0	7	14
Disagreement 26-55	2	4	3	3	10

Of the 27 agriculture agents that completed the PAEI survey instrument, 25 strongly agreed or agreed with the progressive philosophy. This was followed closely by the behavioral philosophy and the liberal philosophy, which each had 22 agents strongly agreeing or agreeing with them. The radical philosophy was the most disagreed with 11 agents either disagreeing or being neutral and none strongly agreeing. The mean score for the agriculture agents for each philosophy was in the range of 67-83. This, along with the fact that the majority of the agriculture agents had scores in the agreement range, shows that overall the agriculture agents were in agreement with each philosophy (Table 13).

Table 13

Distribution of PAEI Scores According to Philosophical Agreement for Agriculture Agents

Scores	L	B	P	H	R
Strong Agreement 95-105	1	3	5	1	0
Agreement 66-94	21	19	20	19	16
Neutral 56-65	3	2	0	4	7
Disagreement 26-55	1	2	2	1	4

Ten forestry, wildlife, and natural resources agents completed the PAEI survey, and the large majority of them were in agreement with all of the philosophies except the radical philosophy. No agents disagreed with or were neutral toward the liberal, behavioral, or progressive philosophies, and only one agent disagreed with the humanistic philosophy. There were 6 agents, however, that disagreed with or were neutral toward the radical philosophy (see Table 14).

Table 14

Distribution of PAEI Scores According to Philosophical Agreement for Forestry, Wildlife, and Natural Resources Agents

Scores	L	B	P	H	R
Agreement 66-94	9	10	9	9	4
Neutral 56-65	0	0	0	0	3
Disagreement 26-55	0	0	0	1	3

The mean score for the liberal, behavioral, progressive, and humanistic philosophies were all in the agreement range. However, the mean score of these agents for the radical philosophy was 62.4, which is in the neutral range (see Table 4).

Of the 15 total family and consumer science agents completing the PAEI, at least 12 of them agreed or strongly agreed with each philosophy. There were no family and consumer science agents that disagreed with or were neutral toward the liberal, behavioral, progressive, or humanistic philosophies. There were 3 of these agents, however, that disagreed with or were neutral toward the radical philosophy (see Table 15). The radical philosophy also had the lowest mean score (76.67) when compared to the other philosophies (see Table 6).

Table 15

Distribution of PAEI Scores According to Philosophical Agreement for Family and Consumer Science Agents

Scores	L	B	P	H	R
Strong Agreement 95-105	1	3	2	2	2
Agreement 66-94	13	12	11	12	10
Neutral 56-65	0	0	0	0	1
Disagreement 26-55	0	0	0	0	2

There were only 4 economic and community development agents that completed the PAEI survey. At least half of the agents agreed with the behavioral, progressive, and humanistic philosophies. There were no agents that strongly agreed with any philosophy, and no agents agreed with the radical philosophy. The most unpopular philosophy was the radical philosophy with 2 agents in the neutral range and one agent that disagreed (see Table 16).

Table 16

Distribution of PAEI Scores According to Philosophical Agreement for Economic and Community Development Agents

Scores	L	B	P	H	R
Agreement 66-94	1	2	3	2	0
Neutral 56-65	1	0	0	1	2
Disagreement 26-55	1	2	1	1	1

Of the 11 4-H and youth development agents that completed the PAEI survey, there were no agents disagreeing with any philosophy. Once again, the majority of the agents were in the agreement range on each philosophy. Very few agents strongly agreed with any philosophy, only one strongly agreed with the behavioral philosophy and one agent strongly agreed with the progressive philosophy (see Table 17). The mean score for each philosophy was in the agreement range. The liberal philosophy had the lowest mean score (73.5), yet it was still in the agreement range (see Table 10).

Table 17

Distribution of PAEI Scores According to Philosophical Agreement for 4-H and Youth Development Agents

Scores	L	B	P	H	R
Strong Agreement 95-105	0	1	1	0	0
Agreement 66-94	8	10	10	9	9
Neutral 56-65	2	0	0	2	1

PALS

The PALS is designed to determine the frequency an adult educator practices a particular teaching style. The PALS consists of 44 items that contain certain things that an adult educator might do in a classroom. The participant must read each statement and respond as to how frequently he or she does that item on a 6-point Likert scale ranging from 0 to 5 (0= Always, 1= Almost always, 2= Often, 3=Seldom, 4=Almost never, 5=Never). The lowest possible score on PALS is 0, and the highest possible score is 220. The teaching style of the educator and how strong that style is can be determined by comparing the educator's score to 146. A learner-centered approach is indicated by a score higher than 146 on the PALS, and a score lower than 146 indicates a teacher-centered approach. The further scores are from 146 indicate a stronger commitment to a particular style. It is possible to have middle-range scores indicating the educator exhibits a learner-centered as well as a teacher-centered approach to teaching (Conti, 2004).

Conti identified seven factors as components of a learner-centered teaching approach. These are learner-centered activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process, and flexibility from personal development.

Factor 1: Learner-Centered Activities indicate how much a teacher allows learners to initiate and take responsibility for their own learning. This factor would show how much of a teacher's classroom focus is on the learner. A teacher-centered style would be signified by students being assigned quiet desk work and the teacher determining the educational objectives for each student. Learner-centered styles would allow students to have more of a say in their education.

Factor 2: Personalizing Instruction indicates to what extent a teacher personalizes his or her instruction for each student. This factor gauges the tendency of an instructor to use a variety of methods and materials, as well as the tendency to encourage cooperation in learning among students.

Factor 3: Relating to Experiences evaluates how well a teacher takes the prior experiences of students into account and how much those experiences are integrated into classroom learning. This factor influences the tendency to organize learning episodes that incorporate problems encountered by students in their everyday lives.

Factor 4: Assessing Student Needs measures the tendency of a teacher to evaluate the gaps between students' goals and their present level of performance. This factor indicates whether a teacher relies on individual conferences and counseling with students.

Factor 5: Climate Building indicates a tendency to encourage a friendly and informal climate in the classroom. Instructors may tend to create a climate that allows students to take risks and uses errors and failures to direct future learning. Interaction with other students is also encouraged.

Factor 6: Participation in the Learning Process appraises the specific tendency of a teacher to allow students to have a say in the topics covered, the problems that are solved, and the criteria for evaluating classroom performance. This factor is similar to Factor 2, but is focused more on the direct involvement of students in their learning.

Factor 7: Flexibility for Personal Development determines whether a teacher views himself or herself as a provider of knowledge or as a facilitator of learning. This factor measures an instructor's flexibility in regard to the classroom environment and curricular content. This

factor affects whether a teacher addresses issues relating to students' values in order to encourage understanding and personal growth.

The mean score for all agents on the PALS instrument was 128.8, which is 17.2 points lower than the Conti's established mean of 146. These results would indicate a more teacher-centered approach to teaching for most agents. However, 10 agents scored higher than 146, which indicates some agents use a learner-center approach to teaching. As Factor 1, learner-centered activities, is examined, the mean scores for all the agents is 37.1 which is only 0.9 points lower than the mean score of 38 established by Conti. This shows that many of the Extension agents allows the students to have more input into their educational needs (see Table 18).

Table 18

Distribution of PALS Factors According to the Mean for All Agents

	Group Mean Scores			Established Mean Scores			
	Mean	# <	# >	Mean	# <	# =	# >
PALS	128.8	43	26	146	59	0	10
Factor 1	37.1	37	32	38	37	6	26
Factor 2	25.0	37	32	31	59	3	7
Factor 3	19.3	38	31	21	47	5	17
Factor 4	10.6	30	39	13	53	6	10
Factor 5	14.5	37	32	16	45	8	16
Factor 6	11.8	32	37	13	43	5	21
Factor 7	10.5	35	34	13	51	8	10

The mean score for the agricultural agents was 128.9 which is 17.1 points lower than the mean score of 146 which was established by Conti. This would indicate most agricultural agents have a teacher centered style of teaching. Of the 27 agricultural agents who completed the survey, 3 had an average score greater than 146 indicating a learner-centered approach to teaching. When examining Factor 1, the mean scores for the agricultural agents is 37.4, which is only 0.6 points lower than the mean score of 38 established by Conti. There were 14 agricultural agents (51.85%) who had a score greater than or equal to the average mean for Factor 1 and Factor 6. This shows that many of the Extension agents allows the students to have more input into their educational needs (see Table 19).

Table 19

Distribution of PALS Factors According to the Mean for Agriculture Agents

	Group Mean Scores			Established Mean Scores			
	Mean	# <	# >	Mean	# <	# =	# >
PALS	128.9	16	11	146	24	0	3
Factor 1	37.4	13	14	38	13	1	13
Factor 2	25.0	19	8	31	23	0	4
Factor 3	18.4	14	13	21	21	0	6
Factor 4	10.6	13	14	13	21	2	4
Factor 5	14.4	17	10	16	19	2	6
Factor 6	12.4	13	14	13	13	1	13
Factor 7	10.5	14	13	13	19	2	6

The mean score for the forestry, wildlife, and natural resource agents was 127.6, which was 18.4 points lower than the mean score of 146 which was established by Conti. This would

indicate most forestry, wildlife, and natural resource agents have a teacher-centered style of teaching. Of the 10 agents who completed the survey, only one had an average score greater than 146 indicating a learner-centered approach to teaching. The mean scores for the forestry, wildlife, and natural resource agricultural agents is 38.4 for Factor 1, which is 0.4 points higher than the mean score of 38 established by Conti. Five of the forestry, wildlife, and natural resource agents (50%) surveyed had a score greater than or equal to the average mean for Factor 1. This shows that many of the Extension agents allow the students to have more input into their educational needs. All 10 (100%) of the forestry, wildlife, and natural resource agents scored below the mean for Factor 2, which is personalizing instruction (see Table 20).

Table 20

Distribution of PALS Scores for Forestry, Wildlife, and Natural Resource Agents

	Group Mean Scores			Established Mean Scores			
	Mean	# <	# >	Mean	# <	# =	# >
PALS	127.6	7	3	146	9	0	1
Factor 1	38.4	6	4	38	5	1	4
Factor 2	23.7	5	5	31	10	0	0
Factor 3	17.8	5	5	21	7	1	2
Factor 4	10.6	4	6	13	9	0	1
Factor 5	14.5	5	5	16	6	1	3
Factor 6	11.2	6	4	13	8	1	1
Factor 7	11.5	3	7	13	6	2	2

The mean score for the family and consumer science agents was 128.7 which is 17.3 points lower than the mean score of 146 which was established by Conti. This would indicate

most family and consumer science agents have a teacher-centered style of teaching. Of the 15 family and consumer science agents who completed the survey, 3 had an average score greater than 146 indicating a learner-centered approach to teaching. As Factor 3, relating to experiences, is examined, the mean scores for the family and consumer science agents is 20.8 which is only 0.2 points lower than the mean score of 21 established by Conti. In addition, 7 of the family and consumer science agents (87.5%) surveyed had a score greater than or equal to the average mean for Factor 3. Seven agents (46.6%) had a score greater than or equal to the mean for Factor 5 and six agents (40%) had a score greater than or equal to the mean score for Factor 6 (see Table 21).

Table 21

Distribution of PALS Scores for Family and Consumer Science Agents

	Group Mean Scores			Established Mean Scores			
	Mean	# <	# >	Mean	# <	# =	# >
PALS	128.7	9	6	146	12	0	3
Factor 1	34.7	8	7	38	9	2	4
Factor 2	26.3	8	7	31	12	1	2
Factor 3	20.8	8	7	21	8	1	6
Factor 4	10.9	4	11	13	11	2	2
Factor 5	14.3	7	8	16	8	5	2
Factor 6	11.6	6	9	13	9	3	3
Factor 7	10.2	9	6	13	12	1	2

The mean score for the economic and community development agents was 131.8 which is 14.2 points lower than the mean score of 146 which was established by Conti. This would indicate most economic and community development agents have a teacher-centered style of

teaching. Of the 5 economic and community development agents who completed the survey, two (40%) had an average score greater than 146 indicating a learner-centered approach to teaching. The mean score for Factor 1, learner-centered activities, was 41.9, which is 3.9 points higher than Conti's established mean. This indicates a more learner-centered approach to their teaching (see Table 22).

Table 22

Distribution of PALS Scores for Economic and Community Development Agents

	Group Mean Scores			Established Mean Scores			
	Mean	# <	# >	Mean	# <	# =	# >
PALS	131.8	3	2	146	3	0	2
Factor 1	41.9	3	2	38	2	0	3
Factor 2	26.6	3	2	31	3	2	0
Factor 3	17.7	2	3	21	4	0	1
Factor 4	10.3	2	3	13	4	1	0
Factor 5	14.8	3	2	16	3	0	2
Factor 6	10.3	2	3	13	4	0	1
Factor 7	10.2	2	3	13	4	1	0

The mean score for the 4-H and youth development agents was 128.6 which is 17.4 points lower than the mean score of 146 which was established by Conti. This would indicate most 4-H and youth development agents have a teacher-centered style of teaching. Of the 12 4-H and youth development agents who completed the survey, 3 had an average score greater than 146 indicating a learner-centered approach to teaching. There were 4 agents (50%) who had a score greater than or equal to the mean established by Conti, indicating a learner-centered

approach. As Factor 3, relating to experiences, is examined, the mean scores is 21.3, which is 0.3 points higher than the mean score of 21 established by Conti. In addition, five (41.4%) of the agents had a score greater than the established mean for Factor 3. This shows that many of the Extension agents allow the students to have more input into their educational needs as well as using previous experiences to relate to classroom learning (see Table 23).

Table 23

Distribution of PALS Scores for 4-H and Youth Development Agents

	Group Mean Scores				Established Mean Scores			
	Mean	# <	# =	# >	Mean	# <	# =	# >
PALS	128.6	8	0	4	146	9	0	3
Factor 1	36.2	6	0	6	38	8	2	2
Factor 2	23.8	6	0	6	31	11	0	1
Factor 3	21.3	7	0	5	21	7	0	5
Factor 4	10.5	7	0	5	13	8	1	3
Factor 5	15.0	5	4	3	16	9	0	3
Factor 6	11.7	6	0	6	13	9	0	3
Factor 7	10.1	7	0	5	13	10	2	0

A regression analysis was performed using SPSS to determine if there were any correlations between the Extension agent's scores on the PAEI and the PALS. When looking at the correlations between the educational philosophies and teaching styles of Extension agents in their respective program areas, no significant correlations were found. All r values were equal to or less than 0.2, which indicates a small, weak relationship.

Chapter 5

Summary, Conclusions, and Recommendations

The purpose of this study was to identify the individual educational philosophies and teaching styles of Extension Agents in ACES using the Philosophy of Adult Education Inventory (PAEI) and Principles of Adult Learning Scale (PALS) instruments. The study also examined the relationship between the educational philosophies and teaching styles of Extension Agents and their respective subject matter areas.

Research Questions

The following research questions were addressed:

1. What are the educational philosophies of Extension Agents in the Alabama Cooperative Extension System using Zinn's Philosophy of Adult Education Inventory (PAEI)?
2. What are the teaching styles of Extension Agents in the Alabama Cooperative Extension System using Conti's Principles of Adult Learning Scale (PALS)?
3. What is the significance of correlations between the identified philosophies and the identified teaching styles for Extension Agents in the Alabama Cooperative Extension System related to their subject matter area of program responsibility: agriculture, forestry, wildlife and natural resources, family and consumer sciences, economic and community development, and 4-H and youth development?

Summary

There were 69 survey instruments completed by Alabama Cooperative Extension Agents. This gave a return rate of 23%. The majority of agents that completed the surveys were agriculture agents (39.1%). Forestry, wildlife, and natural resources agents comprised 14.5% of the completed surveys, while 21.7% were family and consumer science agents. Economic and community development agents accounted for 7.2% of the participants, and 17.4% were 4-H and youth development agents.

On the PAEI survey instrument, the mean for all five subject matter groups recognized progressive philosophy as their highest score. This is not surprising as Zinn (2004) predicted that Extension agents would normally agree with the progressive philosophy. The behavioral philosophy was the second most agreed with philosophy for each subject matter group. The mean for the liberal philosophy was the third highest score for the agriculture, forestry, wildlife, and natural resource, and family and consumer science agent groups. The lowest mean scores for four out of the five groups was the radical philosophy. The mean scores for the agriculture, family and consumer science, and 4-H and youth development agents show they agree with all five philosophies. The mean scores for forestry, wildlife, and natural resource agents show they agree with four out of the five philosophies. Although no groups disagreed with all the philosophies, the economic and community development agents agreed with only one philosophy and were neutral or disagreed with the other four philosophies. There were no groups which strongly agreed or strongly disagreed with any educational philosophy. Although the 4-H and youth development agents had a smaller range of scores across all philosophies, the family and consumer science agents tended to have scores indicating a higher level of agreement with the lowest range across all five educational philosophies. The difference between the highest two

philosophies for all the groups was very small. The average mean for the forestry, wildlife, and natural resource agents, family and consumer science agents, and the economic and community development agents was less than three points. Less than 4 points separated the top two philosophies of the 4-H and youth development agents and less than 6 points separated the top two philosophies of the agriculture agents. (See Table 24)

Table 24

Overview of PAEI Means for All Groups

	L	B	P	H	R
Agriculture	75.96	77.65	83.00	73.76	67.33
Forestry, Wildlife, & Natural Resources	75.44	79.70	81.22	72.40	62.40
Family & Consumer Science	81.29	85.00	88.00	80.14	76.67
Economic & Community Development	59.00	65.00	66.75	60.00	50.33
4-H & Youth Development	73.50	82.55	85.91	74.64	74.20

Of the 68 agents completing the PAEI, there were 61 (89.7%) agreed or strongly agreed with the progressive philosophy. However, there were 60 agents (88.2%) that agreed or strongly agreed with the behavioral philosophy. There was the same number of agents, 54 (79.4%), that agreed or strongly agreed with the liberal and humanistic philosophies. The radical philosophy had the fewest number of agents agreeing or strongly agreeing with it, only 41 (60.3%) (see Table 12). There were a total of 47 agents (69.1%) that had 5 or less points separating their top two philosophies. Sixteen of the agriculture agents (59.3%) and 8 (80%) of the forestry, wildlife, and natural resources agents fell in this category. There were also 14 (93.3%) of the family and consumer science agents, 3 (75%) of the economic and community development agents, and 6

(50%) of the 4-H and youth development agents that had 5 or less points separating their top two scores.

The highest possible score is 105 on the PAEI instrument and twelve participants (17.6%) scored 95 or better in at least one philosophy. Six participants (8.8%) scored 98 or greater and two participants (2.9%) scored 100 in at least one philosophy. The lowest possible score is 15 on the PAEI instrument, and five participants (7.4%) scored 48 or lower in at least one philosophy. Three participants (4.4%) scored 36 or lower. Oddly, the lowest individual score was in the progressive philosophy, which had the highest mean scores in each subject matter group. Four agents (5.9%) tied between two philosophies. Zinn (2004) says it is not uncommon to have a tie in two philosophies. Two (2.9%) tied in liberal and behavioral, one (1.5%) tied in progressive and humanistic, and one (1.5%) tied in liberal and progressive.

Thirty eight agents (55.9%) agreed or strongly agreed with all five philosophies. Twenty agents (29.4%) agreed or strongly agreed with four of the five philosophies. Six agents (8.8%) agreed or strongly agreed with three of the five philosophies. Two agents (2.9%) agreed or strongly agreed with two philosophies. There were no agents who agreed or strongly agreed with only one philosophy. Interestingly, there were two agents (2.9%) who did not agree with any philosophy. Ten agents (14.7%) disagreed with at least one philosophy, and three agents (4.4%) disagreed with more than one philosophy. Two of the agents (2.9%) disagreed with all five philosophies. There were no agents who strongly disagreed with any of the philosophies (see Table 25).

Table 25

Comparison of Philosophical Agreement of All Groups

	w/5	w/4	w/3	w/2	w/1	w/0
Agriculture *(n=27)*	48.1%	22.2%	14.8%	7.4%	0%	7.4%
Forestry, Wildlife, & Natural Resources *(n=10)*	30%	50%	20%	0%	0%	0%
Family & Consumer Science *(n=15)*	60%	33.3%	6.7%	0%	0%	0%
Economic & Community Development *(n=4)*	0%	0%	50%	25%	0%	25%
4-H & Youth Development *(n=12)*	41.7%	50%	8.3%	0%	0%	0%

The average mean established by Conti (2004) for the PALS is 146. The mean for all Extension agents completing the PALS survey was 128.8. Agriculture agents had a mean of 128.9. Forestry, wildlife, and natural resources agents reported a mean score of 127.6, while family and consumer science agents had a mean score of 128.7. There was a mean score of 131.8 for economic and community development agents, and 4-H and youth development agents had a mean score of 128.6. The mean scores for all of the agent groups fell below 146, indicating most agents prefer a teacher-centered approach to learning. While the mean scores for each group

were very close, the range of scores for each group were different. The smallest range was 35 for the forestry, wildlife, and natural resources, while the largest range was 58 for the agriculture agents (see Table 26).

Table 26

Overview of Mean PALS Scores for All Groups

	Agriculture Agents *(n=27)*	Forestry, Wildlife, and Natural Resources Agents *(n=10)*	Family & Consumer Science Agents *(n=15)*	Economic & Community Development Agents *(n=5)*	4-H & Youth Development Agents *(n=12)*
Established Mean	146	146	146	146	146
Group Mean	128.9	127.6	128.7	131.8	128.6
Range	58	35	35	20	29

The standard deviation of the PALS instrument is 20 points, according to Conti (2004). An individual's commitment and support of a particular teaching style can be determined by seeing how close his or her score is to the mean of 146. Scores that fall within one standard deviation indicate support or preference of a particular style. Scores within two standard deviations indicate a stronger commitment to that particular style. Most of the scores of the Extension agents in all subject matter groups fell within 1 standard deviation of the mean. There

were also many agents that fell within 2 standard deviations of the mean with scores between 106 and 125 which indicates a very strong teacher-centered style (see Table 27).

Table 27

Deviation Distribution of PALS Scores Among Groups

	86-105 3 Standard Deviations	106-125 2 Standard Deviations	126-145 1 Standard Deviation	146-166 1 Standard Deviation	167-185 2 Standard Deviations
	Teacher-Centered			Learning-Centered	
Agriculture Agents *(n=27)*	0%	48.1%	40.7%	7.4%	3.7%
Forestry, Wildlife, & Natural Resources Agents *(n=10)*	0%	50%	40%	10%	0%
Family & Consumer Science Agents *(n=15)*	6.7%	33.3%	40%	20%	0%
Economic & Community Development Agents *(n=5)*	0%	40%	20%	40%	0%
4-H & Youth Development Agents *(n=12)*	0%	50%	33.3%	16.7%	0%

The mean scores for all 7 factors for agriculture agents and family and consumer science agents were below the mean scores established by Conti (2004) indicating a teacher-centered approach to each factor. Forestry, wildlife, and natural resources agents and economic and community development agents scored above the established mean on Factor 1 indicating a learner-centered approach to teaching. However, the mean scores on the other factors were below the established mean for each group. The 4-H and youth development agents scored slightly above the established mean on Factor 3 with all other mean scores below the established mean. Based on the individual factors for PALS, there was not a particular subject matter group that was more learner-centered than any other (see Table 28).

Table 28

Overview and Comparison of the PALS Factors for All Groups

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Established Mean	38	31	21	13	16	13	13
Agriculture Agents *(n=27)*	37.4	25.0	18.4	10.6	14.4	12.4	10.5
Forestry, Wildlife, & Natural Resources Agents *(n=10)*	38.4	23.7	17.8	10.6	14.5	11.1	11.5
Family & Consumer Science Agents *(n=15)*	34.7	26.3	20.8	10.9	14.3	11.6	10.2

Table 28 (continued)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Economic & Community Development Agents *(n=5)*	41.9	26.6	17.7	10.3	14.8	10.3	10.2
4-H & Youth Development Agents *(n=12)*	36.2	23.8	21.3	10.5	14.9	11.7	10.1

Thirty participants (44%) scored high in the progressive philosophy, which is more learner focused, and yet had a teacher-centered instructional style. The majority of learner-centered agents (6) reported a progressive philosophy. As expected, 17 (25%) of the participants that scored highest a behavioral philosophy also indicated a teacher-centered approach. Oddly, the most teacher-centered participant, with a score of 104, scored highest in the humanistic philosophy, which is learner-centered (see Table 29).

Table 29

Comparison of Highest PAEI Scores and PALS Scores for Both Groups

	L	B	P	H	R
167-185	0	0	1	0	0
146-166	0	2	5	3	1
126-145	2	8	15	2	1
106-125	5	9	15	1	1
86-105	0	0	0	1	0

Conclusions

The results of the PALS indicate that most of the Extension agents are teacher-centered. They are more likely to not encourage learner-centered activities. Teacher-centered instructors are also not as likely to personalize their students' learning. Extension agents may not take the time to understand a student's personal experiences and incorporate them into a learning activity, nor assess their current level of performance in order to help their students reach their goals. Extension agents do not interact with students as much as needed or allow the students to have input in the topics being covered. Teacher-centered Extension agents may often view themselves as authoritative figures that relay information rather than facilitators of the learning process.

The Extension agents that completed the PAEI and PALS were made aware that their educational philosophy and teaching style were being studied. The Extension agents were told that there were no right or wrong answers; however, they may have answered a question as to what they consider to be the "right" answer instead of answering how they actually believe. The Extension agents may have felt led to follow the educational philosophy or teaching style that they feel is best for an Extension agent.

Some answers on the survey instruments might be influenced by factors outside of the Extension system. For example, some Extension agents teach classes such as pesticide training in which another party designs a test, and Extension agents teach the material and administer the test. In this case, the Extension agent has no flexibility on what is to be taught. The student may ask unrelated questions and the Extension agent may answer; however the Extension agent must cover what will be asked on the exam. Another factor that may affect answers to the surveys is the fact that an Extension agent teaches diverse subjects in diverse settings. Different subjects and settings require different approaches and preparation. The recent activities of an Extension

agent may be what influenced their answers on these surveys which may not be a true reflection of their teaching style or philosophy.

Recommendations

The purpose of this study was to examine the educational philosophies and teaching styles of Extension agents in the Alabama Cooperative Extension System. It may be advantageous to study the educational philosophies and teaching styles of Extension agents in other southeastern states as well as other parts of the country and compare the results.

Extension specialists in the Alabama Cooperative Extension System conduct many educational programs in Alabama, as well as in other states. While they are very knowledgeable in their subject matter area, it is possible that many of them have never been trained in adult education principles. It would be interesting to repeat this research using a population of specialists, or at least including them in the population. This might prompt more training for specialists in the area of adult education, or prompt more specialists to take formal adult education classes. It would at least make specialists more aware of their teaching styles and educational philosophies, which could lead to more effective teaching.

Many Extension agents in ACES have previously taken formal adult education classes. It might be noteworthy to examine the differences in philosophies and teaching styles of those agents that have had formal adult education classes and those that have not taken such classes.

Some of the Extension agents who participated in this study may have never given much thought to their educational philosophy or teaching style. Therefore, it may prove beneficial to retest the same participants at a later time and find out if they have altered their educational philosophy or teaching style in order to become better educators.

By taking this survey, these Extension agents may alter their teaching style in certain situations to become better instructors. Research could also be done to see how teaching style affects student achievement. It could be determined what impact teaching style has on a student's ability to comprehend and retain information.

Additional useful information could be determined by analyzing educational philosophies and teaching styles compared to length of employment as an educator. A teacher's educational philosophy is a work in progress, constantly changing. An instructor's teaching style is also constantly evolving. Experience in the classroom and with students should cause educators to reflect on their philosophy and teaching style. Extension agents often have their students fill out evaluation forms on classes they have attended. This feedback is then used to improve the class when it is taught again. Further research could determine if and how educational philosophy and teaching style change over time as the educator gains more experience.

Extension agents teach a diverse group of students. Different students are interested in learning new concepts for different reasons. It would be beneficial to see if Extension agents displayed different teaching styles or philosophies based on the type of student motivation. For example, some are interested in making money, some are interested in new hobbies, and others are required to attend classes for various reasons. Houle (1973) has concluded that there are three types of student motivation: learning oriented, goal oriented, and activity oriented. Learning oriented students are usually avid readers who are interested in a variety of topics. These students love to learn for the sake of learning. Goal oriented students have a particular purpose for their learning. In Extension, this purpose may be to make or save money or to lose weight. Activity oriented students simply love to attend class. These students enjoy the social aspects of being in

a group of other learners. Many retired adults attend Extension programs and trainings in order to meet new people with similar interests.

Implications

Most Extension agents tend to have teacher-centered styles of instruction. According to Brown (2003b), one reason Extension agents may be more teacher-centered is that they have not received any training in adult education. They may not be aware of how to incorporate adult learning principles or learner-centered theories into their teaching. They may simply be teaching the same way they have always been taught. Having a degree in adult education does impact an instructor's teaching style and philosophy (Powell, 2006). Since most agents have a progressive philosophy, which is more learner-centered, they should want to be trained in adult learning practices. This would better equip Extension agents in choosing effective teaching methods for their students (Powell, 2006). Since many Extension agents do not have adult education degrees, it may be helpful to offer inservice trainings that would inform agents of adult education principles. Extension agents might be more likely to attend inservice trainings or classes about adult education if their supervisors encouraged it more. Oftentimes, the supervisor may not be aware of adult education principles or their usefulness to Extension agents.

Experience in adult education may also need to be considered when hiring new Extension agents. The agents should still be very knowledgeable in their subject matter area, but a class or two in adult education could be very beneficial. When new Extension agents are hired, they may not have any previous adult education experience, but they may be willing to take some formal classes. Their willingness to learn more about adult education principles may need to be a factor in the hiring process.

According to Galbraith (2004), it is assumed that the purpose of education is to guide learners on a journey through personal growth and development. By not considering teaching and learning styles and philosophies, Extension agents and other adult educators waste time and other resources. Studying adult education principles would make Extension agents more effective. Once Extension agents have been made aware of their educational philosophies and teaching styles, they need to take time every so often to reflect on if and how their philosophy and style has changed. Completing the PAEI and PALS instruments periodically would help Extension agents monitor how they teach and possibly provide ways that they can improve the effectiveness of their teaching.

References

Apps, J. W. (1973). *Toward a working philosophy of adult education*. Syracuse: Syracuse University.

Apps, J. W. (1985). *Improving practice in continuing education*. San Francisco: Jossey-Bass.

Berends, M. (2006). Survey methods in educational research. In Green, J. L., Camilli, G., & Elmore, P. B. (Eds.), *Handbook of complementary methods in education research* (pp. 623-640). Mahwah, NJ: Lawrence Erlbaum Associates.

Bergevin, P. (1967). *A philosophy for adult education*. New York: The Seabury Press.

Boone, H. N., Gartin, S. A., Wright, C. B., Lawrence, L. D., & Odell, K. S. (2002). Adult education philosophies practiced by agricultural education teachers in Pennsylvania, Virginia, and West Virginia. *Journal of Agricultural Education, 43*(3), 37-48.

Borg, W. R., & Gall, M. D. (1989). *Educational research: An introduction* (5th ed.). New York: Longman, Inc.

Borg, W. R., Gall, J. P., & Gall, M. D. (1993). *Applying educational research: A practical guide* (3rd ed.). New York: Longman, Inc.

Brookfield, S. D. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass Publishers.

Brown, B. L. (2003a). *Teaching style vs. learning style: Myths and realities* (Report No. 26). Washington, D. C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED482329)

Brown, K. L. (2003b). From teacher-centered to learner-centered curriculum: Improving learning in diverse classrooms. *Education*, *124*(1), 49-54.

Caldwell, P. A. (1981). Preservice training for instructors of adults. In Grabowski, S. M., *Preparing educators of adults*, (pp.1-16). San Francisco: Jossey-Bass Publishers.

Candy, P. C. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass Publishers.

Caudron, S. (2000). Learners speak out. *Training & Development*, *54*(4), 52-57.

Chen, I. (n. d.). *Behavioral theories*. Retrieved August 12, 2011, from University of Houston, College of Education Web site: http://viking.coe.uh.edu/~ichen/ebook/et-it/behavior.htm

Collins, M. (1986, October). *Philosophy and the role of the adult educator*. Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education, Hollywood, FL. (ERIC Document Reproduction Service No. ED277859)

Conner, M. L. "Andragogy and pedagogy." Ageless Learner, 1997-2004. http://agelesslearner.com/intros/andragogy.html

Conti, G. J. (1982). The principles of adult learning scale. *Adult Literacy and Basic Education*, *Spring*, 135-147.

Conti, G. J. (1983). *Principles of adult learning scale: Followup and factor analysis* (Report No. CE035525). (ERIC Document Reproduction Service No. ED228424)

Conti, G. J. (1985). Assessing teaching style in adult education: How and why. *Lifelong Learning*, *8*(8), 7-11.

Conti, G. J. (2004). Identifying your teaching style. In M. W. Galbraith (Ed.), *Adult*

learning methods: A guide for effective instruction (3rd ed.) (pp. 75-92). Malabar, FL: Krieger Publishing Co.

Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: SAGE Publications, Inc.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass, Inc.

Daley, B. J. (2003). A case for learner-centered teaching and learning. *New Directions for Adult and Continuing Education, 98*, 23-30.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley and Sons, Inc.

de Chambeau, F. A. (1977). Why? What? or How? Philosophy as a priority for educators of adults. *Adult Leadership, 25*, 308.

Dunn, R. S., & Dunn, K. J. (1979). Learning styles/teaching styles: Should they…can they…be matched? *Educational Leadership, 36*(4), 238-244.

Elias, J. L. (1995). *Philosophy of education: Classical and contemporary*. Malabar, FL: Krieger Publishing Company.

Elias, J. L., & Merriam, S. B. (2005). *Philosophical foundations of adult education* (3rd ed.). Malabar, FL: Krieger Publishing Co.

Ferraro, J. M. (2000). *Reflective practice and professional development*. (ERIC Document Reproduction Service No. ED449120)

Fidishun, D. (n.d.). *Andragogy and technology: Integrating adult learning theory as we teach with technology*. Retrieved October 7, 2010, from http://frank.mtsu.edu/~itconf/proceed00/fidishun.htm

Fischer, B. B., & Fischer, L. (1979). Styles in teaching and learning. *Educational Leadership*, *36*(4), 245-254.

Floyd, T. D. (2010). *An exploratory study of the philosophy and teaching styles of Georgia workforce educators and entrepreneurship instructors*. Unpublished doctoral dissertation, Auburn University, Auburn.

Freire, P. (1970). *Pedagogy of the oppressed* (M. B. Ramos, Trans. 30th Anniversary Edition ed.). New York: Continuum International.

Galbo, C. (1998). Helping adults learn. *Thrust for Educational Leadership*, *27*(7), 13-16.

Galbraith, M. W. (Ed.). (1991). *Facilitating adult learning: A transactional process*. Malabar, FL: Krieger Publishing Co.

Galbraith, M. W. (2004). *Adult learning methods: A guide for effective instruction* (3rd ed). Malabar, FL: Krieger Publishing Co.

Giroday, R. J. (2006). *An educational personal working philosophy: Reflections, analysis, and critique*. Unpublished manuscript.

Gomberg, L. E., & Gray, S. W. (2001). Five basic principles for effectively managing the classroom. *Adult Learning*, *11*(4), 24-27.

Gregorc, A. F. (1979). Learning/teaching styles: Potent forces behind them. *Educational Leadership*, *36*(4), 234-236.

Heimlich, J. E., & Norland, E. (1994). *Developing teaching style in adult education*. San Francisco: Jossey-Bass.

Heimlich, J. E., & Norland, E. (2002). Teaching style: Where are we now? *New Directions for Adult and Continuing Education*, *93*, 17-26.

Hiemstra, R. (1991). Aspects of effective learning environments. *New Directions for*

Adult Education, 50, 5-12.

Holmes, G., & Abington-Cooper, M. (2000, Summer/Fall). Pedagogy vs. andragogy: A false dichotomy? *The Journal of Technology Studies*, *26*(2). Retrieved October 11, 2011 from http://scholar.lib.vt.edu/ejournals/JOTS/Summer-Fall-2000/holmes.html

Houle, C. O. (1973). *The external degree*. San Francisco: Jossey-Bass.

Jensen, G., Liveright, A. A., & Hallenbeck, W. (Eds.). (1964). *Adult education: Outlines of an emerging field of university study*. Washington, D. C.: Adult Education Association.

Kennedy, R. C. (2003). Applying principles of adult learning: The key to more effective training programs. *FBI Law Enforcement Bulletin*, *72*(4), 1-5.

Kerka, S. (2002). *Teaching adults: Is it different? Myths and realities*. Washington, D. C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED468614)

Knowles, M. S. (1951). *Informal adult education: A guide for administrators, leaders, and teachers*. New York: Association Press.

Knowles, M. S. (Ed.). (1960). *Handbook of adult education in the United States*. Chicago, IL: Adult Education Association.

Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. New York: Association Press.

Knowles, M. S. (1977). *A history of the adult education movement in the United States*. Huntington, NY: Robert E. Krieger Publishing Co.

Knowles, M. S. (1990). Fostering competence in self-directed learning. In R. M. Smith (Ed.), *Learning to learn across the life span* (pp. 123-136). San Francisco: Jossey-Bass Publishers.

Langenbach, M. (1988). *Curriculum models in adult education*. Malabar, FL: Robert E. Krieger Publishing Company.

Lazar, J., & Preece, J. (1999). Designing and implementing web-based surveys. *The Journal of Computer Information Systems*, *39*(4), 63-67.

Lieb, S. (1991). *Principles of adult learning*. Retrieved November 14, 2011, from Honolulu Community College, Faculty Development Teaching Tips Web site: http://www2.honolulu.hawaii.edu/facdev/guidebk/teachtip/adults-2.htm

Long, H. B. (1983). *Adult learning: Research and practice*. New York: Cambridge, The Adult Education Company.

Louisell, R. D., & Descamps, J. (1992). *Developing a teaching style: Methods for elementary school teachers*. New York: Harper Collins Publishers.

McCombs, B. L., & Miller, L. (2007). *Learner-centered classroom practices and assessments: Maximizing student motivation, learning, and achievement*. Thousand Oaks, CA: Corwin Press.

McKenzie, L. (1985). Philosophical orientations of adult educators. *Lifelong Learning*, *9*(1), 18-20.

Merriam, S. B., & Brockett, R. G. (1997). *The profession and practice of adult education*. San Francisco: Jossey-Bass.

Merriam, S. B., & Caffarella, R. S. (1991). *Learning in adulthood*. San Francisco: Jossey Bass.

Nuckles, C. R. (2000). Student-centered teaching: Making it work. *Adult Learning*, *11*(4), 5-6.

Potvin, R. M. (2007). *Methodology for conducting a web-based survey of museum*

professionals. Retrieved June 15, 2012, from http://www.brown.edu/Research/JNBC/presentations_papers/working_museumprof_training.php

Powell, L. (2006). *An exploratory study of the philosophy and teaching styles of Alabama workforce education and entrepreneurship instructors*. Unpublished doctoral dissertation, Auburn University, Auburn.

Reischmann, J. (2004). Andragogy, history, meaning, context, function. At: http://www.andragogy.net Version Sept. 9, 2004.

Robinson, E. T. (2002). Educational philosophy in pharmacy education: Starting the dialogue. *Pharmacy Education, 2*(3), 97-100.

Seaman, D. F., & Fellenz, R. A. (1989). *Effective strategies for teaching adults*. Columbus, OH: Merrill.

Seevers, B., Graham, D., & Conklin, N. (2007).*Education through cooperative extension* (2nd ed.). Columbus, OH: Curriculum Materials Service.

Skager, R. (1978). *Lifelong education and evaluation practice: A study on the development of a framework for designing evaluation systems at the school stage in the perspective of lifelong education*. New York: UNESCO Institute for Education.

Smith, M. K. (2002). 'Malcolm Knowles, informal adult education, self-direction and anadragogy', *The encyclopedia of informal education*, www.infed.org/thinkers/et-knowl.htm.

Spurgeon, L. P., & Moore, G. E. (1997, Summer/Fall). The educational philosophies of

training and development professors, leaders, and practitioners. *The Journal of Technology Studies, 23*(2), 11-19. Retrieved October 13, 2011, from http://scholar.lib.vt.edu/ejournals/JOTS/Summer-Fall-1997/PDF/

Stitt-Gohdes, W. L. (2003). Student teachers and their students: Do their instructional and learning preferences match? *Business Education Forum, 57*(4), 22-27.

Stitt-Gohdes, W. L. (2001, Fall). Business education students' preferred learning styles. *Journal of Career and Technical Education, 18*(1). Retrieved September 8, 2011 from http://scholar.lib.vt.edu/ejournals/JCTE/v18n1/stitt.html

Thompson, J., Licklider, B., & Jungst, S. (2003). Learner-centered teaching: Postsecondary strategies that promote "thinking like a professional. *Theory Into Practice, 42*(2), 133-141.

Tisdell, E. J., & Taylor, E. W. (1999). Adult education philosophy informs practice. *Adult Learning, 11*, 6-10.

Turner, R. L. (1979). The value of variety in teaching styles. *Educational Leadership, 36*(4), 257-258.

White, B. A., & Brockett, R. G. (1987, Summer). Putting philosophy into practice. *Journal of Extension, 25*(2), Article 2FEA3. Retrieved October 13, 2011, from http://www.joe.org/joe/1987summer/a3.php

Wiersma, W., & Jurs, S. G. (2009). *Research methods in education: An introduction*. Boston: Pearson Education, Inc.

Williams, B. C. (1999). *Educational philosophies and teaching styles of University of Florida cooperative extension agents*. Unpublished doctoral dissertation, Florida Atlantic University, Boca Raton.

Zinn, L. M. (1983). Development of a valid and reliable instrument for adult educators to identify a personal philosophy of adult education (Doctoral dissertation, Florida State University, 1983). *Dissertation Abstracts International*, *44*, 1667A-1668A.

Zinn, L. M. (2004). Exploring your philosophical orientation. In M. W. Galbraith (Ed.), *Adult learning methods: A guide for effective instruction* (3rd ed.) (pp. 39-74). Malabar, FL: Krieger Publishing Co.

Appendix A

Survey Use Approval

ALABAMA COOPERATIVE Extension SYSTEM
Alabama A&M and Auburn Universities

Office of the Director
109 Duncan Hall
Auburn, AL 36849
Phone: 334-844-5546
Fax: 334-844-5544

September 27, 2012

Dear IRB Committee,

The Alabama Cooperative Extension System uses field agents to educate adults on a variety of topics. It is possible for an educator to teach more effectively if he or she has a better understanding of their educational philosophy and teaching style. William East Jr. has my permission to survey selected field agents in the Alabama Cooperative Extension System to determine their educational philosophies and teaching styles.

Sincerely,

Gary D. Lemme
Extension Director

Appendix B

Research Approval by Institutional Review Board

Office of Research Compliance
115 Ramsay Hall, basement
Auburn University, AL 36849

AUBURN UNIVERSITY

Telephone: 334-844-5966
Fax: 334-844-4391
hsubjec@auburn.edu

April 16, 2013

MEMORANDUM TO: Mr. William East
Department of Educational Foundations, Leadership, and Technology

PROTOCOL TITLE: "Educational Philosophies and Teaching Styles of Alabama Cooperative Extension System Agents"

IRB FILE NO.: 12-353 EX 1210

APPROVAL DATE: October 31, 2012
EXPIRATION DATE: October 30, 2015

The referenced protocol was approved "Exempt" by the IRB under its FederalWide Assurance, number 0001104, and per 45 CFR 46.101 (b) (2):

> (2) "Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
> (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and
> (ii) any disclosure of the human subjects' response outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation."

Note the following:

1. CONSENTS AND/OR INFORMATION LETTERS: Only use documents that have been approved by the IRB with an approval stamp or approval information added.
2. RECORDS: Keep this and all protocol approval documents in your files. Please reference the complete protocol number in any correspondence.
3. MODIFICATIONS: You must request approval of any changes to your protocol before implementation. Some changes may affect the assigned review category.
4. RENEWAL: Your protocol will expire in three (3) years. Submit a renewal a month before expiration. If your protocol expires and is administratively closed, you will have to submit a new protocol.
5. FINAL REPORT: When your study is complete, please notify the Office of Research Compliance, Human Subjects.

If you have any questions concerning this Board action, please contact the Office of Research Compliance.

Sincerely,

Christopher Correia, Ph.D.
Chair of the Institutional Review Board #2
for the Use of Human Subjects in Research

cc: Dr. J. Witte

Appendix C

Participant Information Letter

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

Participant Information Letter

For Extension Agents

INFORMATION SHEET

For a Research Study Entitled

"Educational Philosophies and Teaching Styles of Alabama Cooperative Extension Agents"

November 5, 2012

You are invited to participate in a research study to investigate the educational philosophies and teaching styles of Extension Agents in the Alabama Cooperative Extension System. This study is being conducted by William East Jr. (Chip), a doctoral student in Adult Education from Auburn University studying Educational Philosophies and Teaching Styles under the supervision of Dr. James Witte, Associate Professor of Educational Foundations, Leadership and Technology. I hope to learn about correlations between educational philosophies and teaching styles of Alabama Cooperative Extension System agents. You were selected as a possible participant because you are an Agent Assistant, County Agent, Regional Agent, Urban Agent, or County Coordinator with the Alabama Cooperative Extension System.

If you decide to participate, I have included a link to two survey instruments, Zinn's Philosophy of Adult Education Inventory (PAEI), and Conti's Principles of Adult Learning Scale (PALS). As you may be aware, the first survey reports your personal philosophical orientation toward teaching adults and the second identifies preferred teaching styles. These surveys do not have "right" or "wrong" answers; they merely report your philosophy towards adult education and preferred teaching style. The PAEI can be completed in about 20 minutes, and the PALS in about 15 minutes.

These surveys provide you with an opportunity to access your personal education philosophy. Because the philosophy and teaching style are related, this kind of self-awareness can enable you to evaluate teaching behaviors in your educational efforts.

Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be published in a professional journal, and/or presented at a professional meeting. You may certainly choose to withdraw from participation at any time without penalty. However, if anonymous information has been provided, you will be unable to withdraw that data after participating since there will be no way to identify individual information.

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

Your decision whether or not to participate will not jeopardize your future relations with the Department of Educational Foundations, Leadership, and Technology or Auburn University. If you have any questions I invite you to ask them now. If you have questions later, either Chip East at 256-354-5976 (or e-mail at eastwil@aces.edu) or Dr. James Witte at 334-844-3054 will be happy to answer them.

For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

William East Jr.

William (Chip) East Jr.
Doctoral Student, Adult Education
Auburn University

Dr. James Witte
Professor
Auburn University

"The Auburn University Institutional Review Board has approved this document for use from October 31, 2012 to October 30, 2015. Protocol #12-353 EX 1210 "

http://www.surveymonkey.com/s/T6WJK97

Appendix D

PALS and PAEI Survey Instrument

1. The program area in which I spend the majority of my time is...

○ agriculture	○ forestry, wildlife, and natural resources	○ family and consumer science	○ economic and community development	○ 4-H and youth development

2. IN PLANNING AN EDUCATIONAL ACTIVITY, I AM MOST LIKELY TO:

	1 (Strongly disagree)	**2**	**3**	**4 (Neutral)**	**5**	**6**	**7 (Strongly agree)**
Identify, in conjunction with learners, significant social, cultural, and/or political issues and plan learning activities around them	○	○	○	○	○	○	○
Clearly identify the results I want and construct a program [class workshop] that will achieve those results	○	○	○	○	○	○	○
Begin with a lesson plan that organizes what I plan to teach, when and how	○	○	○	○	○	○	○
Assess learners' needs and develop valid learning activities based on those needs	○	○	○	○	○	○	○
Consider the areas of greatest interest to the learners and plan to deal with them regardless of what they may be	○	○	○	○	○	○	○

3. PEOPLE LEARN BEST:

	1 (Strongly Disagree)	**2**	**3**	**4 (Neutral)**	**5**	**6**	**7 (Strongly agree)**
When the new knowledge is presented from a problem-solving approach	○	○	○	○	○	○	○

	1 (Strongly Disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
When the learning activity is clearly structured and provides for practice and repetition							
Through discussion with other learners and a group coordinator							
When they are free to explore, without the constraints of a "system"							
From an "expert" who knows what he or she is talking about							

4. THE PRIMARY PURPOSE OF ADULT EDUCATION IS:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
To facilitate personal development on the part of the learner							
To increase learners' awareness of the need for social change and to enable them to effect such change							
To develop conceptual and theoretical understanding							
To establish the learners' capacity to solve everyday problems							
To develop the learners' competency and mastery of specific knowledge and skills							

5. MOST OF WHAT PEOPLE KNOW:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Is a result of consciously pursuing their goals, solving problems as they go							
They have learned through critical or reflective thinking focused on important social, cultural, and political issues							

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
They have learned through a trial-and-feedback process	○	○	○	○	○	○	○
They have gained through self-discovery rather than some "teaching" process	○	○	○	○	○	○	○
They have acquired through a comprehensive educational process	○	○	○	○	○	○	○

6. DECISIONS ABOUT WHAT TO INCLUDE IN A LEARNING ACTIVITY:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Should be made mostly by the learner in consultation with a facilitator	○	○	○	○	○	○	○
Should be based on what learners know and what the teacher believes they should know at the end of the activity	○	○	○	○	○	○	○
Should be based on a consideration of key social, political, and/or cultural situations	○	○	○	○	○	○	○
Should be based on a consideration of the learners' needs, interests, and problems	○	○	○	○	○	○	○
Should be based on careful analysis by the teacher of the material to be covered and the concepts to be taught	○	○	○	○	○	○	○

7. GOOD ADULT EDUCATORS START PLANNING INSTRUCTION:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
By considering the specific outcomes they are looking for and the most efficient ways of producing them in learners	○	○	○	○	○	○	○
By identifying everyday problems that can be solved as a result of the instruction	○	○	○	○	○	○	○
By clarifying the content, concepts, and/or theoretical principles to be taught	○	○	○	○	○	○	○

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
By clarifying key social, cultural, and/or political issues that affect the lives of the learners							
By asking learners to identify what they want to learn and how they want to learn it							

8. AS AN ADULT EDUCATOR, I AM MOST SUCCESSFUL IN SITUATIONS:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
That are unstructured and flexible enough to follow learners' interests							
That are fairly structured, with clear learning objectives and built-in feedback to the learners							
Where I can focus on practical skills and knowledge that can be put to use in solving problems							
Where the scope of the new material is fairly clear and the subject matter is logically organized							
Where the learners have some awareness of social and/or political issues and are willing to explore the impact of such issues on their daily lives							

9. IN PLANNING AN EDUCATIONAL ACTIVITY, I TRY TO CREATE:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
The real world - problems and all - and to develop learners' capacities for dealing with it							
A setting in which learners are encouraged to examine their beliefs and values and to raise critical questions							

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
A controlled environment that attracts and holds the learners, moving them systematically towards the objective(s)	○	○	○	○	○	○	○
A clear outline of the content and the concepts to be taught and learned	○	○	○	○	○	○	○
A supportive climate that facilitates self-discovery and interaction	○	○	○	○	○	○	○

10. THE LEARNERS' FEELINGS DURING THE LEARNING PROCESS:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Must be brought to the surface in order for learners to become truly involved in their learning	○	○	○	○	○	○	○
Provide energy that can be focused on problems or questions	○	○	○	○	○	○	○
Will probably have a great deal to do with the way they approach their learning	○	○	○	○	○	○	○
Are used by the skillful adult educator to accomplish the learning objective(s)	○	○	○	○	○	○	○
Are likely to get in the way of teaching and learning by diverting the learners' attention	○	○	○	○	○	○	○

11. THE TEACHING METHODS I PREFER TO USE:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Focus on problem-solving and present real challenges to the learner	○	○	○	○	○	○	○
Emphasize practice and feedback to the learner	○	○	○	○	○	○	○
Are mostly non-directive, encouraging the learner to take responsibility for his/her own learning	○	○	○	○	○	○	○

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Involve learners in dialog and critical examination of controversial issues	○	○	○	○	○	○	○
Are determined primarily by the subject or content to be covered	○	○	○	○	○	○	○

12. WHEN LEARNERS ARE UNINTERESTED IN A SUBJECT, IT IS PROBABLY BECAUSE:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
They do not realize how serious the consequences of not understanding or not learning the subject may be	○	○	○	○	○	○	○
They do not see any benefit for their daily lives	○	○	○	○	○	○	○
The teacher does not know enough about the subject or is unable to make it interesting to the learner	○	○	○	○	○	○	○
They are not getting adequate practice or feedback during the learning process	○	○	○	○	○	○	○
They are not ready to learn it or it is not a high priority for them personally	○	○	○	○	○	○	○

13. DIFFERENCES AMONG ADULT LEARNERS:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Are relatively unimportant as long as the learners gain a common base of understanding through the learning experience	○	○	○	○	○	○	○
Enable them to learn best on their own time and in their own way(s)	○	○	○	○	○	○	○
Are primarily due to differences in their life experiences and will usually lead them to make different applications of new knowledge and skills to their own	○	○	○	○	○	○	○

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
situations							
Arise from their particular cultural and social situations and should not be minimized even as they recognize common needs and problems							
Will not interfere with learning if each learner is given adequate opportunity for practice and reinforcement							

14. EVALUATION OF LEARNING OUTCOMES:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Is not of great importance and may not be possible, because the impact of learning may not be evident until much later							
Should be built into the system, so that learners will continually receive feedback and can adjust their performance accordingly							
Is best done by the learners themselves, for their own purposes							
Lets me know how much learners have increased their conceptual understanding of new material							
Is best accomplished when the learner encounters a problem, either in the learning setting or the real world, and successfully resolves it							

15. MY PRIMARY ROLE AS A TEACHER OF ADULTS IS TO:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Guide learners through structured learning activities with well-directed feedback							

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
Systematically lead learners in acquiring new information and understanding underlying theories and concepts							
Help learners identify and learn to solve problems better							
Increase learners' awareness of environmental, social, and political issues and help them learn how to have an impact on these situations							
Facilitate, but not to direct, learning activities							

16. IN THE END, IF LEARNERS HAVE NOT LEARNED WHAT WAS TAUGHT:

	1 (Strongly disagree)	2	3	4 (Neutral)	5	6	7 (Strongly agree)
The teacher has not actually "taught"							
They need to repeat the experience, or a portion of it							
They may have learned something else that they consider just as interesting or useful							
They do not recognize how learning will enable them to significantly influence social change							
It is probably because they are unable to make practical application of new knowledge to solve problems in their daily lives							

17. I allow students to participate in developing the criteria for evaluating their performance in class.

Always Almost Always Often Seldom Almost Never Never

18. I use disciplinary action when it is needed.

Always Almost Always Often Seldom Almost Never Never

19. I allow older students more time to complete assignments when they need it.

Always Almost Always Often Seldom Almost Never Never

20. I encourage students to adopt middle class values.

Always Almost Always Often Seldom Almost Never Never

21. I help students diagnose the gaps between their goals and their present level of performance.

Always Almost Always Often Seldom Almost Never Never

22. I provide knowledge rather than serve as a resource person.

Always Almost Always Often Seldom Almost Never Never

23. I stick to the instructional objectives that I write at the beginning of a program.

Always Almost Always Often Seldom Almost Never Never

24. I participate in the informal counseling of students.

Always Almost Always Often Seldom Almost Never Never

25. I use lecturing as the best method for presenting my subject material to adult students.

Always Almost Always Often Seldom Almost Never Never

26. I arrange the classroom so that it is easy for students to interact.

Always Almost Always Often Seldom Almost Never Never

27. I determine the educational objectives for each of my students.

Always Almost Always Often Seldom Almost Never Never

28. I plan units which differ as widely as possible from my students' socio-economic backgrounds.

Always Almost Always Often Seldom Almost Never Never

29. I get a student to motivate himself/herself by confronting him/her in the presence of classmates during group discussions.

Always Almost Always Often Seldom Almost Never Never

30. I plan learning episodes to take into account my students' prior experiences.

Always Almost Always Often Seldom Almost Never Never

31. I allow students to participate in making decisions about the topics that will be covered in class.

Always Almost Always Often Seldom Almost Never Never

32. I use one basic teaching method because I have found that most adults have a similar style of learning.

Always Almost Always Often Seldom Almost Never Never

33. I use different techniques depending on the students being taught.

Always Almost Always Often Seldom Almost Never Never

34. I encourage dialogue among my students.

Always Almost Always Often Seldom Almost Never Never

35. I use written tests to assess the degree of academic growth rather than to indicate new directions for learning.

Always Almost Always Often Seldom Almost Never Never

36. I utilize the many competencies that most adults already possess to achieve educational objectives.

Always Almost Always Often Seldom Almost Never Never

37. I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.

Always Almost Always Often Seldom Almost Never Never

38. I accept errors as a natural part of the learning process.

Always Almost Always Often Seldom Almost Never Never

39. I have individual conferences to help students identify their educational needs.

Always Almost Always Often Seldom Almost Never Never

40. I let each student work at his/her own rate regardless of the amount of time it takes him/her to learn a new concept.

Always Almost Always Often Seldom Almost Never Never

41. I help my students develop short-range as well as long-range objectives.

Always Almost Always Often Seldom Almost Never Never

42. I maintain a well-disciplined classroom to reduce interferences to learning.

Always Almost Always Often Seldom Almost Never Never

43. I avoid discussion of controversial subjects that involve value judgments.

Always Almost Always Often Seldom Almost Never Never

44. I allow my students to take periodic breaks during class.

Always Almost Always Often Seldom Almost Never Never

45. I use methods that foster quiet, productive desk work.

Always Almost Always Often Seldom Almost Never Never

46. I use tests as my chief method of evaluating students.

Always Almost Always Often Seldom Almost Never Never

47. I plan activities that will encourage each student's growth from dependence on others to greater independence.

Always Almost Always Often Seldom Almost Never Never

48. I gear my instructional objectives to match the individual abilities and needs of the students.

Always Almost Always Often Seldom Almost Never Never

49. I avoid issues that relate to the student's concept of himself/herself.

Always Almost Always Often Seldom Almost Never Never

50. I encourage my students to ask questions about the nature of their society.

Always Almost Always Often Seldom Almost Never Never

51. I allow a student's motives for participating in continuing education to be a major determinant in the planning of learning objectives.

Always Almost Always Often Seldom Almost Never Never

52. I have my students identify their own problems that need to be solved.

Always Almost Always Often Seldom Almost Never Never

53. I give all students in my class the same assignment on a given topic.

Always Almost Always Often Seldom Almost Never Never

54. I use materials that were originally designed for students in elementary and secondary schools.

Always Almost Always Often Seldom Almost Never Never

55. I organize adult learning episodes according to the problems that my students encounter in everyday life.

Always Almost Always Often Seldom Almost Never Never

56. I measure a student's long-term educational growth by comparing his/her total achievement in class to his/her expected performance as measured by national norms from standardized tests.

Always Almost Always Often Seldom Almost Never Never

57. I encourage competition among my students.

Always Almost Always Often Seldom Almost Never Never

58. I use different materials with different students.

Always Almost Always Often Seldom Almost Never Never

59. I help students relate new learning to their prior experiences.

Always Almost Always Often Seldom Almost Never Never

60. I teach units about problems of everyday living.

Always Almost Always Often Seldom Almost Never Never