

The Evolution Of The Integrated Three-Component Model Of Agricultural Education

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Abstract

This research project sought to determine the origin of the three-component model of agricultural education in the United States, and provided a contextual base for future research into the three-component model for agricultural education. The study concluded that each of the three components of the agricultural education model originated at different times in American history, but were developed simultaneously. Supervised experience probably originated in colonial America, and formal instruction in agricultural education probably began in 1858. The FFA was officially established in 1928, although similar agricultural youth organizations probably began either at the end of the nineteenth century or the beginning of the twentieth century. This study did not find evidence of an established date or recognized event that created the three-component agricultural education model. The Smith-Hughes Act of 1917 provided a more sophisticated linkage between classroom instruction and supervised experience. This study did not find evidence of a legal basis for the integral nature of the three-component agricultural education model. Instead, the integral nature of the model probably exists out of tradition, or as the result of a philosophical tenet in the agricultural education profession.

Introduction/Theoretical Framework

The predominant model for organizing instruction in agricultural education involves the interrelationships between three major concepts: classroom and laboratory instruction, supervised agricultural experience, and agricultural youth organization participation (Phipps and Osborne, 1988). Classroom and laboratory instruction are those activities that provide learning experiences within the confines of a school facility. These classroom activities are characterized by learning activities designed by an agriculture teacher and presented to students using formal instruction methods such as lecture, demonstration, guided and independent practice, review and assessment. Instruction includes but is not limited to agricultural and natural resources, agricultural mechanics, animal science, horticulture, agricultural production and biotechnology (Talbert, Vaughn & Croom, 2006).

Supervised agricultural experience (SAE) is an independent learning program for students enrolled in agricultural education courses. It is designed to provide learning experiences for students in the agricultural career pathway of their choice. Supervised agricultural education is characterized by an education plan cooperatively developed by the student, the agriculture teacher, the student's parents, and an employer if necessary. This education plan is carried out in a location outside of normal daily instruction in agricultural education. The student completes various learning activities and maintains records of his or her progress in these activities. Supervised agricultural experience helps students put into practice the principles they learned in the agriculture classroom. Students who excel in the supervised agricultural experience are rewarded through the Future Farmer of America (FFA) proficiency awards program and the FFA membership degree program.

The FFA is an instructional tool that compliments both classroom and laboratory instruction and supervised agricultural experience. FFA programs are designed to encourage students to perform well academically. In addition, the FFA assists in the development of students' interest in agricultural careers through support of the supervised agricultural experience program. FFA activities include career development events; individual member awards programs, scholarships and leadership programs (Phipps & Osborne, 1988).

The agricultural education model requires that agricultural education programs have all three interrelated components as part of the instructional program – classroom and laboratory instruction, supervised agricultural experience and FFA (Talbert, Vaughn & Croom, 2006). However, a number of studies have indicated a decline in the number of students involved in supervised experience. Dyer and Osborne (1996) found that no common standards existed for the assessing the quality of SAE programs. However, Dyer and Osborne (1996) and Cheek, Arrington, Carter and Randell (1994) conclude that SAE programs lack overall direction and goals by which program quality can be measured. Even though classroom instruction improves SAE quality, there is great variance in how teachers manage the SAE program (Dyer & Osborne, 1996). A number of related studies (Dyer & Osborne, 1995; Dyer & Williams, 1997; Steele, 1998;) conclude that many teacher-educators, teachers, and program administrators fail to fully implement SAE in the agricultural education program, even though SAE has a proven economic impact (Retallick & Martin, 2005).

With regard to the FFA element of the model, there is a significant gap between the number of agricultural education students and the number of students who are official members of the FFA (Talbert, Vaughn, & Croom, 2006), even though FFA membership has continued to increase in the recent years (National FFA Organization, 2006a). Even though students who join the FFA were more connected to the industry of agriculture and were more engaged in agricultural education coursework (Talbert & Balschweid, 2004; Croom & Flowers, 2001), the National FFA Organization (2006a) reported a gap of almost 200,000 students between FFA membership and student enrollment in agricultural education programs. Of the components in the three-component model of agricultural education, instruction is the only one that exists in the greatest frequency. If this model composed in such a way that classroom instruction, FFA and SAE are integrally linked and equally-weighted components, then why do the FFA and SAE components generally subordinate themselves to instruction? Is the three-component model flawed in some manner?

Purpose

The overall purpose of this research project was to determine the origin of the three-component model of agricultural education in the United States. The objectives for this research project were to identify the origins of the each of the three components of the integrated agricultural education model and to establish the origin of the integrated agricultural education model. This research project also sought to provide a contextual base for future research into the three-component model for agricultural education.

Procedure

This is a historical research study. Historical research is an interpretation of the past and its influence on the present (Rury, 2006). Constructivist theory proposes that all knowledge arises out of prior experience, and therefore research into past events helps members of society gain a better understanding of the present time (Gray, 1964). Santayana (1962) encapsulated the need for historical research when he wrote that:

Progress, far from consisting in change, depends on retentiveness. When change is absolute there remains no being to improve and no direction is set for possible improvement: and when experience is not retained, as among savages, infancy is perpetual. Those who cannot remember the past are condemned to repeat it (Santayana, 1962).

Gall, Borg and Gall (1996) outlined procedures for completing historical research, and these guidelines were used in the study. A preliminary bibliographical source was created consisting of primary and secondary sources. Primary sources of information included reports from the Federal Board for Vocational Education, and the published manuscripts of agricultural educators in the early twentieth century. Secondary sources included but were not limited to data from refereed journal articles and historical information available from established institutions. Secondary sources were compared to selected primary sources to ascertain their accuracy. Using the methods prescribed by Gall, Borg and Gall (1996) and Howell and Prevenier (2001), sources of information were subjected to internal criticism for accuracy and external criticism for authenticity. The literature review was performed using the methods prescribed by Henry (2006) in that readings were selected about the research topic and related topics in an effort to triangulate facts and references. Readings were also selected that contrasted with or took the opposing view of the agricultural education model in order to maintain a certain degree of skepticism by the researcher.

Findings

The origin of the instruction component

The first known agricultural educators on the North American continent were native indigenous peoples who passed down methods for cultivation to successive generations (Barger, 2006). The first formal compulsory education system arrived on the continent through passage of the Massachusetts Act of 1642 (Barger, 2006). Prior to this, most youth were educated through apprenticeships in the various trades in colonial America. The Massachusetts law provided for the formal study of religion and the laws of the Commonwealth of Massachusetts. Schools became the place where classical education was provided, with studies concentrating on Latin, and the basics of reading and mathematics (Urban & Wagoner, 2000).

In the mid to late eighteenth century, organizations and societies began promoting agricultural education outside of the formal school establishment. The Philadelphia Society was established in 1785 for the purpose of familiarizing members with improved agricultural methods. In 1792, the Massachusetts Society for Promoting Agriculture set up meetings for the purpose of inviting farmers to learn new methods of improving agriculture. In the 1850's, agricultural societies

began to disseminate research in agricultural practices in rural communities, primarily through publications, newspaper articles and lectures. Agricultural fairs, formerly an outlet for selling farm animals and products, gradually began to include educational exhibits promoting the best agricultural practices (True, 1969). Massachusetts, Kansas and other states began to hold farmers institutes in the 1850's (True, 1969). The Massachusetts Board of Agriculture appointed a committee in 1858 to develop meetings similar to teacher institutes for the purpose of teaching agricultural topics. This same board published agricultural information in the "Agriculture of Massachusetts" as early as 1854.

The United States government and agricultural colleges and universities began to support agricultural instruction through short courses in agricultural techniques made available to farmers. The Alabama State Agricultural College encouraged farmers to hold meetings regarding agricultural problems. The meetings began around July 10-11, 1884. On June 23, 1868, the Kansas Agricultural College recommended that faculty lecture to assemblies of farmers on the application of modern and approved agricultural practices. In addition to farming topics and home economics subjects, programs often included rural school improvement, road improvement, keeping youth on the family farm, and rural recreation (True, 1969). On November 18, 1868, the Illinois Industrial University established a two-week course on approved practices in farming. Massachusetts and Illinois and Iowa and New Hampshire also adopted similar institutes. By 1880, public institutes were in operation in 26 southern and central states. These meetings were conducted by state boards of agriculture (True, 1969). State appropriations for these institutes appeared in 1891 in 14 states. In 1888, the office of experiment stations (established by the Hatch Act) recognized the value of farmer's institutes, and began collecting data and researching the work of the institutes. At the turn of the twentieth century, agricultural education had begun to expand outward from farmers institutes and university short courses into public schools. In 1906, County school superintendents in Michigan were asked by farmers institute leaders to furnish speakers for the institutes. The speaker would visit local schools and speak to the students. In Arizona in 1909, institute speakers lectured to the school children. Georgia institutes adopted the same practice in 1910 (True, 1969).

Public school agricultural education probably originated around 1858 with the introduction of vocational agricultural training in two Massachusetts schools (Hamlin, 1962). The last half of the nineteenth century saw an increase in agricultural education in local public schools. The New York legislature passed the Nixon Law in 1897 that provided for agricultural education in public schools under the supervision of the Cornell University Agricultural College. The North Carolina state legislature passed the Farm Life Act of 1911 that created schools promoting agriculture and home economics. The course of study was approved by the state school superintendent and the farm-life school advisory board, and had to include practical farm work (Stimson & Lathrop, 1942). Farmers were slow to adapt new and innovative farming methods, and early extension educators perceived that agricultural education in public schools could reach the coming generation of farmers. Until 1912, the most prevalent agricultural extension efforts have been through the agricultural clubs for school-age children (Davis, 1912). Eventually, the federal government would recognize the need and importance of agricultural education and create legislation that specifically encouraged states to develop agriculture teacher training programs, and fund local agricultural education programs. Before the first significant

federal funding for agricultural education arrived in 1917, at least 30 states had agricultural education programs operating in schools (Hamlin, 1962).

The origin of the supervised experience component

Supervised experience was probably the first component of the agricultural education model to be developed, and was probably in the form of youth apprenticeship to a skilled tradesman or as informal education at home. Evidence of apprenticeship can be found in the archeological evidence of the earliest known civilizations and supervised experience in the form of apprenticeship arrived in the American colonies with the first settlers (Struck, 1945). As the apprenticeship method thrived in the new American colonies, schools were established to encourage children to develop basic skills in reading, mathematics, history, Latin and Greek (Urban and Wagoner, 2000). One of the first federal laws to establish some form of agricultural education specifically suited to supervised experience was the Civilization Fund Act of 1819, which provided funding to teach Native Americans “the mode of agriculture suited to their situation” (Fraser, 2001, p. 47).

Significant achievement in establishing supervised experience in schools was accomplished by Rufus W. Stimson, principal of the Smith Agricultural School. Stimson developed the concept of the project method by which students learned the basics of agricultural production methods, and applied these methods on their home farms instead of a school farm (Moore, 1988). The project method involved study directly related to the student’s home project. Subject study is more general, and used to supplement the project method. The project method allows students to proceed at their own pace through the instructional program. Stimson (1919) believed that school projects were unacceptable because they could not be made profitable. School projects often involved too many students engaged in a single project and thus disengaged from real work. Furthermore, there was no personal ownership in school projects, as all earnings went back to school accounts. Stimson (1919) proposed that projects must be on a farm, completed under specific learning conditions with measurable results, and require continuing education. Projects could improve existing farming projects, explore new areas of agriculture, and be entrepreneurial in nature.

Parents favored home projects because they created a tangible result useful to the family farm, reduced the cost of sending a student to school, and allowed the student to be home at work on the farm during a significant part of the day. Stimson proposed that the competent farmer must develop both technical agricultural skill and managerial skill, and that these skills cannot be learned solely from textbooks and classroom instruction (Stimson, 1919). Table 1 describes Stimson’s curriculum model.

The origin of the youth organization component

While vocational agriculture and supervised experience continued to gain support and acceptance, the third component of the agricultural education model began to grow. Organizations for agricultural youth grew out of the boys and girls clubs established at the turn of the twentieth century (Davis, 1912). There is some question as to when boys and girls agricultural clubs were established in the United States. McCormick and McCormick (1984)

proposed that A. B. Graham organized boys and girls clubs in January 1902 in the Springfield Township School community in Clark County, Ohio. Club meetings were held once per month in an assembly room of the county building. These were corn clubs. Later the clubs were broadened to include vegetable projects. The procedure for girls and boys clubs were as follows: A few days before the monthly meeting, each boy and girl was requested to read or study selected passages from a text in order to prepare for the subject being discussed at the upcoming meeting (McCormick and McCormick, 1984).

Table 1:
Stimson's Curriculum Model featuring the project method of study.

Morning Periods (9:00 AM to 12 Noon) for Freshmen and Sophomores		Subjects
Period One – 45 Minutes	Elementary agricultural survey – A general study of agricultural production and rural life.	
Period Two – 90 Minutes	Project work or project study – independent and group study on topics related to home projects.	
Period Three – 45 Minutes	Class discussion of individual home projects.	
Afternoon Periods (1:00 to 4:00 PM) for Advanced Students		Subjects
Period One – 45 Minutes	Advanced agricultural survey – Advanced study of agricultural production and rural life.	
Period Two – 90 Minutes	Project work or project study – independent and group study on topics related to home projects.	
Period Three – 45 Minutes	Class discussion of individual home projects.	

Note. Information adapted from pages 73-74 in Stimson, R. W. (1919). Vocational agricultural education by home projects. New York: MacMillan.

True (1969) raised the possibility that W.B. Otwell may have actually created the first boys and girls clubs in agriculture. These clubs were created in response to the problem of poor attendance at Macopin County, Illinois farmers institutes. To encourage better attendance, Otwell distributed seed corn to local boys and started a contest to see who could make the most yield from it. The first year's contest involved 500 boys. There is also some evidence that the first boys club was organized in the South at Holmes County Mississippi. The club was organized by W.H. Smith the local school superintendent. Mr. Smith was later employed by the USDA to supervise Club work (True, 1969). Agricultural clubs for girls may have begun in the South in Aiken County, South Carolina in 1910. The Aiken County club began with 47 members. This was a home canning club with tomatoes the first product. Girls canning clubs were the precursor to home demonstration projects for women. Once home demonstration agents visited the homes of the girl's mothers, they found way to tactfully help the women with their home work. The

establishment of 4-H clubs helped develop leadership, teach the value of cooperative play, career exploration, practical farm and home training. 4-H Clubs have youth leaders, and an adult leader with the technical knowledge and skill to help manage projects. While boys and girls put on their farm and home demonstration, they would also learn team-work and cooperation (Smith and Wilson, 1930).

At some point, agricultural clubs were organized in schools for the purpose of socialization and to stimulate interest in academic work. These clubs met monthly and agricultural subjects were discussed. Elementary children were organized into junior project clubs (Berry, 1924). In his agricultural education training handbook, Berry (1924) referred to the advising role of teachers in agricultural clubs. Agriculture teachers should be present in the club meetings to lend formality to the meeting, and to offer advice on the matters being discussed. “The wise teacher utilizes pupil activities to as great extent as possible, thereby developing leadership qualities in pupils.” (Berry, 1924, p. 196)

With the passage of the Smith-Hughes Act in 1917, the national coordination of agricultural education naturally made it convenient for the development of an organization for rural youth that encouraged best practices in agricultural production, and provided a outlet for personal growth and development. The National FFA Organization (FFA) was formed in 1928 to encourage social development and agricultural skill development. Around the time that the National FFA Organization formed in 1928, a memorandum of agreement drawn up that showed how the 4-H and agricultural education could cooperate with regard to federal resources. 4-H kids could continue their club work while a member of the agricultural class, however it would be “undesirable for Smith-Hughes Vocational teachers to act as local leaders of 4-H clubs.” (Smith & Wilson, 1930, p. 184) Because the work of agricultural education and cooperative extension often met on the rural farm, it was only natural that boys and girls in 4-H clubs would also take agriculture or home economics classes (Smith & Wilson, 1930).

In the 1930’s and 1940’s, school administrators began to question the role of FFA in the agricultural education program. The Smith-Hughes Act created a partnership between the federal government, state education agencies, and local schools in the administration of agricultural education programs, but the Act did not specifically define the role of FFA in agricultural education. Agricultural education students were participating in FFA field trips, judging contests involving livestock, and other FFA activities that created liability issues for locals education boards (Tenney, 1977). Furthermore, state and federal employees were administering the FFA organization even though it was a private organization (Talbert, Vaughn & Croom, 2006). Prior to the FFA, local agriculture clubs were not well coordinated. Once agriculture clubs became FFA chapters, there was about the degree of responsibility and liability for FFA activities by local school boards. Efforts to resolve this and other administrative matters eventually led to a Congressional charter for the National FFA Organization in 1950. This charter established the FFA organizations purpose, in part, to:

create, foster, and assist subsidiary chapters composed of students and former students of vocational agriculture in public schools qualifying for Federal reimbursement under the Smith-Hughes Vocational Education Act (20 United States Code 11-15, 16-28) and associations of those chapters in the States, territories, and possessions of the United States;... (National FFA Organization, 2006b)

Assembling the model

The second objective of this research project was to determine the origin of the integrated agricultural education model. The United States government eventually established direct federal funding for agricultural education through the passage of the Vocational Education Act of 1917. This act, also known as the Smith-Hughes Act, provided funding for the purpose of training teachers in agricultural education, industrial arts education and home economics education. The act paid the salaries of teachers in these subjects, provided funding for the establishment of teacher education programs in colleges and universities, and funded the hiring of supervisors to manage the expenditure of funds at the school level. These supervisors provided direct assistance to teachers in the teaching of their respective subjects. The Smith-Hughes Act also created a state board for vocational education in each of the states receiving funding under the Act, and created the Federal Board for Vocational Education (Talbert, Vaughn & Croom, 2006). The reports of the Federal Board for Vocational Education and the various agencies that eventually assumed responsibility for the administration and oversight of vocational education provided some insight as to the development of the integrated model. The 1937 Statement Of Policies For The Administration Of Vocational Education provided direction to teachers and state administrators as to the appropriate use of federal funds to supervise student farm projects (United States Department Of The Interior, Office of Education, 1937). Thus, as early as 1917 with the passage of the Smith-Hughes Act, the federal government recognized the need to link together classroom instruction and supervised farming projects.

The Vocational Education Act of 1947 (George-Barden Act, Public Law 79-586) extended the provisions of the Smith-Hughes Act by providing funding to be used by teachers for the purpose of supervising apprentices on the job, and for the purpose of attending meetings and activities of educational associations and other organizations (Hawkins, Prosser & Wright, 1967, p. 408). This presumably refers to FFA meetings and activities. This provision probably arose out of the previously noted concern that schools were not sufficiently insured against the liability of students attending off-campus FFA activities. This measure provided the legal basis for teachers to attend and participate in FFA activities and to supervise students at these activities (Tenney, 1977).

One key indicator of the development of this model is in the agriculture teacher education textbooks of the period. Nolan (1918) posited that in most schools the practical work is, at best, an imitation of real life experience. Boys and girls clubs allow students the opportunity to produce something of value by their own efforts. The home project method organizes instruction around the home project work of boys and girls in clubs. These were agricultural clubs designed to encourage innovation and excellence in agricultural endeavors (Nolan, 1918). Nolan (1918) also proposed the following agenda of a meeting in agricultural clubs:

1. Club plans to buy, sell or exhibit an agricultural product, and also plans social activities.
2. A calendar is created listing all the operations of the project, and records were kept.
3. Study commences of the technical content germane to the project.
4. Laboratory exercises were created to reinforce technical content.

Under this method, boys and girls who were to take agricultural subjects in school were organized into clubs. In these clubs, they were assigned specific home projects. All students completed the same projects for the first two years and assumed new projects as the situation warranted (Nolan, 1918). Snedden (1923) referred to urban boys as having more opportunities for leisure in the form of theatres, museums, lectures, and clubs. Snedden (1923) proposed that enrichment was necessary in vocational education programs. Vocational education led to innovation through the use of creativity in a practical sense. Snedden (1923) identified three pedagogical principles of vocational agriculture that point toward the integrated nature of the agricultural education model:

1. To produce independent farmers and managers.
2. To cause a student to manage an enterprise for at least one year.
3. To encourage self-improvement through self-evaluation and critical thinking.

Vocational agriculture schools provide training specific enough to ensure mastery. This type of school uses the home project method because it yields tangible results with economic gains. Outside of this, a student could do farm work or prepare for college (Snedden, 1923).

Hammonds (1950) proposed that the agriculture teacher is equally responsible for both the instructional program and the FFA program, and that the FFA is an integral part of vocational agriculture. Hamlin (1962) proposed that the Smith-Hughes Act provided federal funding, but the local schools were responsible for local policy, developing a local purpose for agricultural education, and the implementation of agricultural education in the local community. Hamlin (1962) also proposed that the FFA performed citizenship education and promotes civic responsibility, and as such the FFA was integral to the program. Supervised farming stresses individual effort while the FFA encourages group effort (Hamlin, 1962). Stevens (1967) supported the inclusion of FFA by through identification of the basic unit of FFA as the local FFA chapter in a school. Binkley and Hammonds (1970) supported the agricultural education model by stating that the agricultural education program usually includes classroom instruction, agricultural mechanics, SAE, and FFA. Each student in vocational agriculture should have a supervised experience program... because practice is essential to learning.” (Binkley and Hammonds, 1970, P. 18), yet, “The FFA is an important part of vocational agriculture.... Membership is voluntary.” (Binkley & Hammonds, 1970, P. 18) Furthermore, advancement in FFA depends in large part on a student’s SAE. SAE will help students get established in a vocation (Binkley & Hammonds, 1970).

Glen C. Cook wrote a number of textbooks designed to prepare agriculture teachers for field service. Cook’s Handbook On Teaching Vocational Agriculture was first published in 1938, and subsequent editions of it appeared in 1947 and 1952. Under the new authorship of Lloyd Phipps, the Handbook continued to be published as late as 1988. This textbook in its various editions was used for more than 5 decades in teacher education programs in the United States. In the 1938 handbook, Cook identified four phases of vocational agriculture. These were classroom work, supervised farm practice, farm mechanics, and extracurricular activities. Cook (1938) considered supervised farm practice as an integral part of the vocational agriculture program, but stopped short of making the same judgment about the FFA. FFA activities were included as part of group of extracurricular activities acceptable for agricultural education students. These

extracurricular activities included 4-H and agricultural clubs in addition to the FFA. However, in Cook's 1947 Handbook on Teaching Vocational Agriculture (Cook, 1947), the major phases of instruction were identified as classroom activities, supervised farming programs, farm mechanics, community food preservation activities, and Future Farmers of America activities.

Cook (1947) defined the primary aim of vocational education in agriculture as preparing current and future farmers for proficiency in farming, but concluded that both supervised farming programs and the FFA were integral parts of the vocational agriculture program. Cook does not explicitly state that farm mechanics were integral components of the vocational agriculture program. Instead these programs were sub-components of the integral components. Specifically, farm mechanics was a sub-component of supervised farming programs and the community food preservation activities were a good feature in vocational agriculture programs for increasing community support and awareness of the total program (Cook, 1947).

Later editions of the Handbook on teaching vocational agriculture (Phipps & Cook, 1952; Phipps, 1966, Phipps, 1972; Phipps, 1980; Phipps & Osborne, 1988) continued to support the three-component model of agricultural education with one caveat. The component devoted to youth organizations was expanded to include the New Farmers of America and Young Farmers in the 1966 and 1972 editions of the Phipps text. (Phipps, 1966; Phipps, 1972). References to the New Farmers of America in the agricultural education model disappeared after the assimilation of the New Farmers of America by the Future Farmers of America. By the 1988 edition of the handbook (Phipps & Osborne, 1988), references to young farmers in the integral three component model had disappeared, and the four instructional components in agricultural education programs as classroom instruction, supervised experience, laboratory instruction, and vocational student organization

The various editions of the Cook's handbook provide some of the background into the development of the agricultural education model, but did not reduce the model exactly to the present day three-component version. In the 1970's, the FFA began a series of teacher development programs designed to create high quality agricultural education programs (C. Coleman Harris, personal communication, September 12, 2006). The outgrowth of these teacher development programs the inclusion of the integral three-component model of classroom and laboratory instruction, supervised experience, and FFA in the 1975 version FFA Advisors Handbook (National FFA Organization, 1975). Page seven of the text has the Venn configuration of three overlapping circles graphically portraying these three components (Figure 1.). The model was explained in the handbook in such a way as to justify the integral nature of FFA with the instructional program. FFA activities require a combination of supervised experience and instruction. The handbook defines instruction as the classroom component involving the practical application of instruction in the agricultural sciences. Instruction is explicitly referred to as a "component" of the model. Supervised agricultural experience is defined as the individual and independent application of knowledge acquired in the agricultural classroom by a student under the supervision of the agriculture teacher. The 1975 FFA advisors handbook gives the following example of the integral nature of the three components in the model:

“The FFA Proficiency Award program is a good example of this interrelationship. In the classroom students learn the advanced methods of beef cattle production. Through the supervised occupational [sic] experience program the students put the principles and practices learned in the instructional program to practical use. The FFA Beef Proficiency Award program provides the vehicle whereby students receive recognition for their accomplishments.” (National FFA Organization, 1975, p. 7)

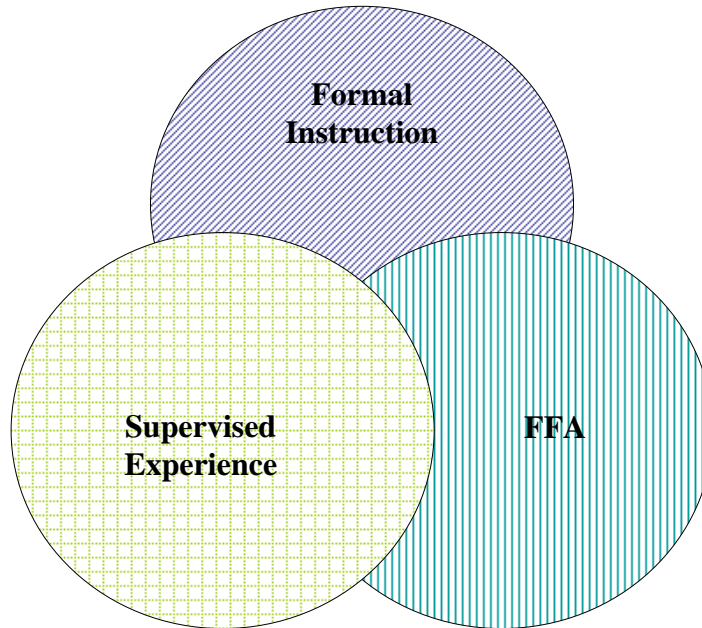


Figure 1. Venn Diagram of the integrated three-component agricultural education model

Bender, Taylor, Hansen and Newcomb (1979) describe the FFA as an integral part of agricultural education, but the purpose of SAE being to encourage participation in agricultural careers. There is no direct mention of SAE as integral to agricultural education. The purpose of SAE is to provide specialized knowledge about agricultural subjects, help students get started in agricultural occupations, and create an opportunity for a student earn money. Wall (1969) proposed that in order for the FFA to effectively contribute to the instructional program, FFA activities should support SAE, and be a learning tool led by the members.

Conclusions, Discussion and Recommendations

This research project was initiated to provide a contextual base for future research into the three-component model for agricultural education, and to determine the origin of the three-component model of agricultural education in the United States. This study concluded that each of the three components of the agricultural education model originated at different times in American history, but were developed simultaneously. Supervised experience was probably the

first of the three components to originate in the United States, but reached a highly sophisticated level of development when it paired first with formal instruction in agricultural education and then later with formal instruction and the FFA. Formal instruction in agricultural education probably began in 1858, and although the FFA was officially established in 1928, similar agricultural youth organizations probably began either at the end of the nineteenth century or the beginning of the twentieth century.

This study did not find evidence of an established date or recognized event that created the three-component agricultural education model. The Civilization Fund Act of 1819 established agricultural education and to a minor extent the relationship between instruction and supervised experience. However, the Smith-Hughes Act of 1917 provided a more sophisticated linkage between classroom instruction and supervised experience. Federal legislation amending the provisions of the Smith-Hughes Act of 1917 supported the incorporation of FFA into the local agricultural education program. The federal charter incorporating the FFA created an opportunity for the FFA organization to exist in schools supported by the Smith-Hughes Act. This study did not find evidence of a significant legal basis for the integral nature of the three-component agricultural education model. State and federal legislation may have influence the adoption of the model, but no government mandate was found that compelled agriculture teachers to adopt the model for use in their programs. Instead, the integral nature of the model seems to exist out of tradition, or as the result of a philosophical tenet in the agricultural education profession.

The term integral is used to describe those things that are essential for the completion of the whole (The American Heritage Dictionary, 1979). While many agricultural education professionals engaged in agricultural education see classroom instruction, supervised experience, and the FFA as integral components of a larger model, there are others who do not share the same sentiment. In 2006, the National FFA Organization challenged the agricultural education community to commit to the goal of 10,000 quality agricultural education programs by the year 2015 (Loudenslager, 2006). If the agricultural education profession hopes to achieve this goal, there must be a commitment by all stakeholders in the execution or delivery of each component to those students who can be served by it.

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