Pioneers in an Emerging Field: Who Were the Early Agricultural Educators?

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Agricultural education in the United States has a rich history over the past century. A number of innovative individuals were responsible for developing the program of agricultural education we ascribe to today. These individuals had little from which to lay a foundation, however their work proved to be beneficial to the success of the field. This historical research study examined the background of early teacher educators in agriculture and early secondary teachers of agriculture. Early teacher educators in agriculture were well educated scholars who recruited qualified individuals to serve as teachers of agriculture and to meet the demands of vacancies in high school vocational agriculture programs. Today, we are faced with a demand for secondary teachers of agriculture. As we work to fill these vacancies, we must look at the work and characteristics of our predecessors in meeting this need.

Keywords: early teachers, historical, history of agricultural education

**Introduction**

Formal and informal education in agriculture existed long before the beginning of the 20th century. Agricultural education was taught in elementary and high schools well before the passage of the Federal Vocational Education (Smith–Hughes) Act of 1917 (Hillison, 1987). In addition, collegiate programs existed to prepare future agriculture teachers before 1917. The histories of the early teacher educators in agriculture and the early secondary teachers of agriculture have not been examined collectively in recent years.

**Theoretical Framework**

Many individuals in the field of agricultural teacher education are familiar with the fact that teacher education programs in agriculture existed to a certain extent before the passage of the Smith–Hughes Act of 1917 (Hillison, 1987). Iowa State University, Pennsylvania State University, and Texas A&M University are examples of institutions that prepared teachers of agriculture before 1917 (Stimson & Lathrop, 1942). Accordingly, many are aware that agriculture was taught in public schools before the Smith–Hughes Act. The Alabama congressional district secondary agricultural schools illustrate this fact (Hillison, 1989; True, 1929).

Teacher education is a relatively new field in academia. Prior to the late 1800s, many teachers did not possess more than an eighth grade education. As normal schools developed through the 19th century, it was recognized that teacher training was a necessary function of colleges and universities (Noll, 1968). Uncertainty as to where teachers of agriculture should be prepared existed from the time of the establishment of the land–grant colleges to the passage of the Smith–Hughes Act (Herren & Hillison, 1996). Existing state normal schools traditionally known for preparing teachers were and are trained under their programs. Examples of normal schools training teachers of agriculture in the early 1900s for elementary and secondary positions included the Wisconsin county training schools for teachers and the county teacher–training schools in Michigan (True, 1929). Upon passage of the Smith–Hughes Act, most state legislatures decided that the federal funds...
allocated for agricultural teacher training would be awarded to land–grant institutions because these colleges had the agricultural equipment, facilities, and faculty necessary to provide sufficient training and preparation (True, 1929).

The Smith–Hughes Act of 1917 provided federal funding for vocational agriculture programs in public high schools (Cook, 1947). Immediately, more teachers of agriculture were needed to fill positions in newly created vocational agriculture programs across the country. Subsequently, teacher educators were needed to prepare these future teachers, therefore departments of agricultural education were created within colleges of agriculture at nearly all land–grant institutions.

Clearly, demand was high for agricultural educators at the secondary and post–secondary level. Individuals forging ahead in the field included people like Rufus Stimson who initiated the idea of the home project plan and Dr. Ashley Storm who was one of the founders of the American Association for the Advancement of Agricultural Teaching (Field, 1929). The names of these individuals are familiar, but many are not aware of the stories behind these names. These were the people who created the curricula and philosophies for agricultural education, the framework from which today’s programs were built. Additionally, stories of the early teachers of agriculture have been passed down, and while it is assumed these individuals had some background in production agriculture, little is shared about the path these individuals took to become secondary teachers of agriculture.

One priority of the National Council for Agricultural Education 10 x 15 Initiative is Agriculture Educator Recruitment ("10 x 15": The long–range goal for agricultural education, n.d.). Recruitment and retention of agricultural educators has long been a recognized issue within the field. As the profession examines this priority of the 10 x 15 Initiative, we must reflect on the backgrounds of the people who pioneered an emerging field while working to meet the demands of filling positions in secondary agricultural education.

Purpose and Objectives

The purpose of this study was to examine the background of early agricultural educators prior to, and immediately following the time of the Smith–Hughes Act of 1917. The objectives include:

1. Describe the educational and vocational background of teacher educators in agricultural education in the time period of 1900–1930.
2. Describe the educational and vocational background of teachers of agriculture in the time period of 1900–1930.

Methods/Procedures

Historical research methods were used to gather findings for this study. According to Ary, Jacobs, Razavieh, and Sorensen (2006), the intended result of historical research is an “increased understanding of the present and a more rational basis for making choices” (p. 466). Data were collected from Agricultural Education, the Journal of Agricultural Education (formerly the Journal of the American Association of Teacher Educators in Agriculture), and previous historical titles on agricultural education by True (1929) and Stimson and Lathrop (1942).

Few primary sources were available; therefore the author relied on secondary sources for the study. Secondary sources included articles in Agricultural Education and the Journal of Agricultural Education, agricultural education history books, and an agricultural education text book. Documents from these sources were reviewed to find information pertaining to teacher educators, teachers of agriculture, and training requirements in order to achieve the research objectives. A variety of individuals and institutions were chosen in order to give the study a national scope.

Historical criticism was employed to evaluate the sources. External criticism determines whether the documents are authentic (Ary et al., 2006). The researchers found the sources to be genuine and valid in the content they provided. Internal criticism evaluates the “worth of the evidence” (Ary et al., 2006, p. 467) for each source. The researchers evaluated the sources for internal criticism and found each source to be accurate and worthy for the study. Lincoln and Guba’s (1985) criteria were used for establishing trustworthiness of the results. To that end, the researchers attempted to provide
“thick descriptions” of the results (Lincoln & Guba, 1985, p. 316), to allow readers to make their own transferability judgments. The researchers used multiple sources of information to establish credibility of the findings, thus establishing dependability (Lincoln & Guba, 1985). Thorough records were kept of all documents identified and used in the study. Quotations from articles and books related to early agricultural educators and the training requirements for pre-service teachers of agriculture were used to confirm the results.

Results/Findings

Background of Early Teacher Educators

The earliest teacher educators did not receive formal training in agricultural education at the collegiate level. Even though these individuals did not have a Bachelors, Masters, or Doctorate of Philosophy in Agricultural Education, they did possess educational degrees and in many cases, teaching experience upon appointment to their position as teacher educators in agriculture.

Rufus W. Stimson.
Stimson is well known for developing and promoting the home project plan of teaching agriculture and promoting the idea of itinerant teacher-training. He received the Artium Baccalaureus (Bachelor’s degree) in philosophy from Harvard University in 1895 and the Artium Magister (Master’s degree) from Harvard in 1896 (Moore, 1988). In 1897, Stimson graduated from the Yale Divinity School. He accepted a teaching assignment in “English, ethics, and public speaking at the Connecticut Agricultural College” (Moore, 1988, p. 50) and remained there until 1908, serving as president of the institution from 1901–1908. After leaving the Connecticut Agricultural College, Stimson headed up the first permanent school of secondary agriculture in Massachusetts, at Northampton (Heald, 1929). Stimson also served the state of Massachusetts as a state supervisor of agricultural education until retirement. Following retirement, Stimson was appointed as a research specialist for the United States Office of Education to write History of agricultural education of less than college grade in the United States (Moore, 1988).

Dr. Kary C. Davis.
Kary Davis, noted as being the first student in America to receive a Ph.D. in agriculture, earned this degree at Cornell. Prior to Cornell, he received a Master’s degree from Kansas State College. Serving as principal and agriculture teacher in Menomonie, Wisconsin, at the first county agricultural school in America, Davis was recognized nationally and internationally for his methods, particularly the solutions of problems teaching method in agricultural education. In 1913, the Peabody College in Nashville, Tennessee, called Davis to serve as head of the newly formed School of Country Life. Throughout his career, Davis promoted the job analysis method for organizing agricultural content for high school teachers and eventually published a series of textbooks on the topic (Chesnutt, 1929).

Prof. Walter H. French.
This member of the “old guard of vocational agricultural education” (Hamlin, 1929, p. 12) attended Michigan State Normal College, graduated in 1888, and received a Master of Science degree from the University of Michigan. A career in education followed including five years as principal in Litchfield, Michigan, and eight years as commissioner of schools for Hillsdale County, Michigan. He was appointed Deputy Superintendent of Public Instruction for the state of Michigan in 1900. While in Hillsdale County, French formed an association of school officers and eventually served as president of the Michigan State Teacher’s Association. Additionally, he studied law while in Hillsdale and was admitted to the bar in 1902 (Noll, 1968).

In 1908, the Michigan Agricultural College established a Department of Agricultural Education and French was chosen as department head. His interests included furthering agricultural education in the elementary and high school settings and providing reading courses for adults. French was an originator of the Association for the Advancement of Agricultural Teaching and a leader in the agricultural section of the National Society for Vocational Education (Hamlin, 1929).

Dr. Ashley V. Storm.
Storm’s early career included serving as superintendent of schools at Storm Lake, Iowa,
Cherokee, Iowa, and finally Iowa City, before becoming an extension professor of public school agriculture at Iowa State College in 1907. While in Iowa City, Storm pursued his Master’s degree at the University of Iowa. When Iowa State College formed a Department of Agricultural Education, Storm was selected to chair the department (Field, 1929). According to Beckman, many high school and college faculty members felt that Storm was “headed down a blind alley” (as cited in Field, 1929, p. 10) when he made the choice to leave school administration and pioneer agricultural education. His career took him to the University of Minnesota where he established a Division of Agricultural Education and became the first leader of that entity.

Storm taught in country and city schools in Illinois, Iowa, and Nebraska and owned and operated farms prior to serving as a school superintendent. While in Nebraska, Storm pursued a degree in law during the evenings. He passed the bar and practiced law in Nebraska for a short time before he returned to teaching. Storm served as president of the Northwest Iowa Teacher’s Association during his time as an educator and was active in the National Education Association.

Ashley Storm was credited as a “great organizer of short courses in America” (Davis as cited in Field, 1929, p. 15) and assisted Davis in writing the textbook “How to Teach Agriculture.” He was a founder and president of the American Association for the Advancement of Agricultural Teaching as well as a founder and the first national president of Gamma Sigma Delta, an honorary society of agriculture (Field, 1929).

Aretas Wilbur Nolan.
A.W. Nolan, born and raised on a farm, began his career in education in 1894 with undergraduate studies at Indiana University; however it wasn’t until 1905 that he received the Artium Baccalaureus degree. This 11 year span included time served as a teacher in elementary and secondary schools including a principalship in 1900 and superintendent position beginning in 1904. He attended the Teacher’s College at Columbia University in New York, in 1906. The year 1908 began Nolan’s career in higher education when he was named Assistant Professor of horticulture and forestry at West Virginia University. He rose to the position of Associate Professor of agricultural education and served in that role until he accepted a position at the University of Illinois (Lawson, 1930).

Nolan began his career at the University of Illinois in 1912 as an Assistant Professor of extension and taught courses in rural education at the University of Chicago during the summers of 1914–1915. Upon passage of the Smith–Hughes Act, Nolan was appointed to state supervisor of agricultural education in Illinois in 1917. While serving in that role, he was enrolled as a graduate student at the University of Illinois, eventually accepting a faculty position in agricultural teacher education as Associate Professor and director of teacher-training in 1920 (Lawson, 1930).

Other leaders in teacher education.
Other leaders in teacher education in agriculture included Jeremiah Lillard of California who served as a lecturer during summer sessions at the University of California, Berkeley in the 1920s. During that time, he also served as president of Sacramento Junior College (Griffin, 1929). Another Californian, Henry Marvin Skidmore, a contemporary of Lillard, served as the state supervisor of classes for training teachers of agriculture at the University of California. Skidmore is credited with developing “a system of apprenticeship teaching that stands somewhat unique among the directed teaching methods employed by various states” (Griffin, 1929, p. 16).

Background of Early Teachers of Agriculture
Prior to the Smith–Hughes Act of 1917, there were few requirements for teachers of agriculture, illustrated by Martin, “In the early days of agricultural education, no certificate was generally required to teach agriculture” (1967, p.12). Holton described the early teacher of agriculture of the 1920s:

The teacher of vocational agriculture is a man 30 years of age; he has a Bachelor of Science degree from a standard agricultural college and has had 9 semester hours of graduate work; he was born and reared on a farm and has had 11 years of practical experience in farming; he has been teaching vocational agriculture three years and has
had one year experience in teaching other subjects before he began teaching vocational agriculture; he receives an annual salary of $2,400 (as cited in Wiseman, 1930, p.51).

According to the editor of Agricultural Education, Sherman Dickinson (1930), H.O. Sampson of New Jersey was thought to be the first high school teacher of agriculture in the country at Waterford, Pennsylvania, in 1904–1905. Dickinson made an editorial note that if any reader had a better claim to the title to notify him. After examination of subsequent issues of the magazine, no corrections were published. However, the first teacher of agriculture in Ohio is documented in Elyria, Ohio, around 1890. During that year, the local school employed a science teacher who “also had a considerable knowledge of agriculture” (Stimson & Lathrop, 1942, p. 359).

Even earlier than these instances, agriculture was taught in state agricultural schools associated with the land–grant institutions in states such as Alabama, Connecticut, Minnesota, and Rhode Island. Teachers at these schools tended to be faculty members from the land–grant colleges and experiment stations. Additionally, principals of these schools were regularly given teaching duties in addition to their administrative responsibilities.

By 1902, the Association of Agricultural Colleges and Experiment Stations (AACES) recommended that new teachers of agriculture should be graduates of an agricultural college. Further it was suggested that this person might teach other subjects such as chemistry, botany, and zoology (True, 1929). The AACES, along with the state board for vocational education in Ohio in 1924 allowed for, or permitted the teacher of agriculture to also serve as the high school principal (Fife as cited in Stimson & Lathrop, 1942). The idea of the “teacher–principal” can be further traced to the beliefs of Liberty Hyde Bailey of Cornell University (Martin, 1967) supporting the notion that early teachers of agriculture served as leaders within schools.

Teachers beginning a career in vocational agriculture after the Smith–Hughes Act often had a different biography than those who began teaching general agriculture before 1917. By 1929, it was recognized that students from schools with agriculture programs were attending the state agricultural colleges and that the colleges were then training teachers of agriculture for the local schools (Shepardson, 1929). In order to meet the demand of vocational agriculture teachers in 1917, some states initiated a merger between the county extension agency and local high schools, making extension club agents teachers for the newly formed agriculture programs supported by Smith–Hughes Act funds (Shepardson, 1929). While men made up the majority of individuals planning to be teachers of agriculture, in 1924 there were 55 women in teacher–training programs in agriculture and 4,692 men. Previous to that in 1919, there were 1,289 men and 45 women enrolled in teacher preparation programs across the country (True, 1929).

The following are biographical sketches of four early teachers of agriculture who were highlighted in Agricultural Education.

Robert A. Condee, Chino, California.

Robert Condee served as principal and agricultural teacher at the Chino Vocational High School, beginning in 1914. He served in this role for nearly 16 years. Condee was very active in the agriculture activities of the state including membership in the State Agricultural Society, the State Board of Agriculture, and the California Holstein Council. He also served as a regent of the University of California. These contacts allowed him to promote the provisions of the Smith–Hughes Act across the state of California. Condee’s agriculture experience began with general farming after graduating from high school and later he served as a county horticulture inspector before entering education (McPhee, 1931).

Carl G. Howard, Sheridan, Wyoming.

Howard was named “Master Teacher” in the state of Wyoming for the 1928–1929 school year. The agricultural experience of Howard included farming in Michigan and Illinois, serving as an agricultural engineer in eastern Canada, and managing a 640 acre fruit farm. Howard also served as a second lieutenant of infantry during World War I. His educational experience included attendance in the public schools of Illinois and a Bachelor of Science degree in agriculture from the University of Illinois in 1917. After coming to Wyoming, he completed graduate work at the University of
Wyoming. Howard taught a variety of subjects including physics, chemistry, general agriculture, and vocational agriculture. His vocational teaching experience began in Kimball, Nebraska, in 1919, continued in Las Cruces, New Mexico, and led to Sheridan in 1921. Job analysis work was one of Howard’s priorities and he was recognized by his peers as one of the pioneers in this area. He authored a “Job Plan Book for Animal Production” which was disseminated to teachers across Wyoming and neighboring states (Ross, 1929).

The following two individuals were highlighted in a recurring segment in Agricultural Education, authored by Dr. Aretas E. Nolan of the University of Illinois. The segment was titled “Successful Teachers of Vocational Agriculture.”

**Walter Newlin, Casey, Illinois.**

This teacher of agriculture graduated from the College of Agriculture at the University of Illinois in 1918. Following graduation, he served in World War I and came to Casey to serve as vocational agriculture teacher in 1920. In the first year, Newlin focused on classroom teaching and “careful and tactful study and observation of the community problems” (Nolan, 1929a, p. 3). According to Nolan, many in the community were opposed to the study of agriculture in local high schools; however there was no indication why there was opposition. After visiting other departments of vocational agriculture and gaining the cooperation of the community, Newlin developed a growing program. By August 1929, after nine years of teaching, Newlin had prepared nine boys to attend the state agricultural college, some who were planning to become vocational agriculture teachers (Nolan, 1929a).

**Jerome Embser, Newton, Illinois.**

Jerome Embser began teaching vocational agriculture in the summer of 1927. His agricultural experience included farm experience from the time he was a child. At the University of Illinois, Embser completed a general agriculture course and 21 credit hours of professional training in education. Embser’s first work in the Newton community was to visit all boys in the vocational agriculture program and to become familiar with their projects (Nolan, 1929b).

**Conclusions/Recommendations/Implications**

**Background of Early Teacher Educators**

Early teacher educators of agriculture were well qualified to develop agricultural education departments at higher education institutions. These individuals possessed Master’s and Doctorate degrees in agriculture and/or education. Rufus Stimson was Harvard and Yale educated, and even possessed a degree in divinity. Having teaching experience at the elementary, secondary, and collegiate level in agricultural subjects, early professors were able to bring real experiences to their students even though agricultural education was in its infancy as a post-secondary field of study. The individuals examined in this study were innovative. Proposing the idea of home projects (Stimson), recognizing the importance of the problem methods of teaching (Davis), and forming professional organizations (Storm) shows us that these people were committed to the future of agricultural education and wasted no time in acknowledging the elements necessary to secure a successful future.

Turn–of–the–century teacher educators were willing to take risks. Ashley Storm was derided by his colleagues when he decided to enter new, undeveloped territory. Walter French studied law while serving as a full–time educator, not an easy task even in that era. We must constantly be aware that the elements put in place by our predecessors have secured our position in agricultural education today. If we are to ensure that security for our successors, what do today’s teacher educators need to consider for tomorrow?

**Background of Early Teachers of Agriculture**

Early teachers of agriculture taught other subjects, namely science, and were leaders in their schools. Agriculture teachers in the early part of the 20th century were involved in other activities related to agriculture and exhibited the qualities and expectations of today’s teachers of agriculture. Individuals like Jerome Embser recognized the importance of the home visit, still an effective practice employed today. The successes of these teachers of agriculture serve as a motivator to individuals entering the field today and those who continue to teach agriculture.
Further examination of the finding related to the teaching of other subjects leads us to the current day. In a time when we must justify the content of secondary agricultural education programs to ensure a future in a comprehensive school system, we realize it is necessary to continue to show stronger links to STEM subjects of science, technology, engineering, and math. The results of the current study showed that as agricultural education spread across the country, science teachers with agriculture experience were sought out to teach vocational agriculture classes.

Summary

Agriculture teacher recruitment is a priority for the National Council for Agricultural Education. Where will we look to find the individuals needed for the positions that will develop over the course of the next decade? Teachers like Walter Newlin encouraged his students to attend college and become teachers of agriculture. In a recent discussion on teacher recruitment, a practicing secondary teacher of agriculture suggested that each current teacher encourage one of their own students to teach agriculture as a future career. This practice will help retain the current teaching force in agriculture, but where will we seek the additional teachers needed to meet the demands of the 10x15 Initiative? Will these teachers be recruited from the population of agriculture college graduates as they were at the passage of the Smith–Hughes Act when the demand for agriculture teachers was also high? Will tomorrow’s teachers possess practical agricultural experience? Some of the earliest teachers of agriculture did not have an agricultural background. Can these individuals still be successful if given the appropriate training, content, and experience? How heavily do we rely on youth organizations like 4-H and FFA as a recruitment base for future teachers of agriculture? How were early teachers recruited when 4-H clubs were in their infancy and FFA didn’t exist? These are all matters to be considered as we examine recruitment of future teachers of agriculture.

References


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