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Smith-Hughes Act Turns 100

Be Relevant or Be Forgotten

by John C. Ewing

Have you ever taken the time to reflect on how you got to where you are today? You can probably say that much (or at least some) of your success is because of what you have done in the past. Just as importantly, however, have you taken the time to think about why you are where you are today, because of what others have done, or done for you? The opportunities that we have today have often come about because of what others have done, or done for us, in the past. As we reflect on what has been done in the past to impact agricultural education, let us not forget that what we do today will impact agricultural education for the next fifty, seventy-five, or even one-hundred years, just as the Smith-Hughes Act has done for us.

In this issue of the Agricultural Education Magazine we will have the opportunity to reflect on the history of agricultural education, and how it was impacted by the Smith-Hughes Act of 1917. We have dedicated an entire issue of the Magazine to celebrate this important legislation that has shaped our past, and will continue to shape our future. We will learn about the people that made this legislation possible. We will see how education was in need of change, and how this Act made that change happen. One lasting impact of the Smith-Hughes Act was that it made education accessible, and relevant, for individuals beyond the higher class of society. My challenge to each of us, as we read this issue of the Magazine, is to think how we can continue to keep our classes, our laboratories, and our profession relevant for the future success of our current students.

In his "Theme Editor Comments", Dr. Gary Moore reminds us that students were dropping out of school in the early 1900's at an alarming rate, due to the lack of relevancy to their future lives. While not all students will leave our schools today, if they don't find relevance in the instruction, they very well may leave our programs. Actually, the students that need us the most may never come to our programs, because they don't see the connection to their future lives, just as those students 100 years ago.

Agricultural education still has much to offer to students from all backgrounds, whether it is a student that plans to enter production agriculture or a student that just wants to be more literate about how their food is produced and processed. Our role as educators is to show these students the relevance, and opportunities, associated with agricultural education. We are able toprovide relevance on a daily basis, thanks to the Smith-Hughes Act of 1917, and all the individuals that worked to ensure its success. For that, we owe a huge debt to those that came before us. We also have the responsibility to provide the best education through agriculture content to our students. I know that you are doing this each and every day in your communities, and for that I say Thank You. More importantly, those that look back on this issue in the future will thank you, because you have helped train the leaders that make agriculture the best that it can be.

Dr. John C. Ewing is an Associate Professor at The Pennsylvania State University and Editor of ***The Agricultural Education Magazine.***

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THEME EDITOR COMMENTS

Why was the Smith-Hughes Act Needed?

by Gary Moore

Deplorable. That one word is a pretty good description of the status of education in the early 1900s. By the time students reached the age of 14 they dropped out of school. In 1908-09 only 4% of the students who were being schooled were in high school. Ninety-three percent (93%) of all students were in elementary school and the remaining 3% were in college. So why were students not going to high school?

The focus of the high school was to prepare students for college which meant considerable emphasis on learning Latin and Greek. What was taught had little relevance to the daily life of the students. As a matter of fact, once a person got past the three R's, a good bit of what was taught in the elementary or high school school, had little relevance to the daily life of the students. Schooling consisted of rote memorization followed by recitation and a lot of "book learning."

In 1910 seventy-two percent of Americans lived in rural areas. Was this fact considered in determining what should be taught in school? In some states it was, but it many states it was not. Between 1900 and 1915 many schools across the country started teaching agriculture. But it was a sporadic, disjointed effort. It was often "book agriculture", had no hands-on learning component, and was taught by ill prepared teachers.

The editors of Wallace's Farmer magazine declared in 1905 that we need to abandon "the cut-and-dried formula of a period when a man was 'educated' only when he knew Greek and Latin". An editorial in Hoard's Dairyman stated that education was "as it was 60 years ago in our boyhood, so it is today in 99 out of 100 schools. Not a grain of progress that will help the country boy to a better understanding of the problem of agriculture (cited by Cremin, 1961)." In 1903 a school superintendent in Illinois (Kern) asked "Why not a course of training in the country school for the country boy which shall teach him more about the country life about him? Along with his study of the kangaroo, the bamboo and cockatoo, why not study the animals of the farm…"

Liberty Hyde Bailey (1904), Dean of Agriculture at Cornell University, described how out of touch the schools were. He wrote "The child lives in one world and goes to school in another world" (p. 31). He related an experience in a rural New York school:

"The class in geography was on exhibition for there were visitors. The questions were answered quickly. 'How far is it from Rome to Corinth?' 'From Rome to Constantinople?' 'From Paris to Rome?' A visitor was asked if he had any questions to propound. He had one: 'How far is it from Huevelton to Ogdensburg?' No one answered; yet the visitor said that none of the pupils would likely go from Rome to Constantinople, but that every one of them would go from Heuvelton to Ogdensburg" (p. 34).

There were similar sentiments in the city. Schools were not meeting the needs of boys and girls in the city neither. V. F. Thompson, Assistant Superintendent of Schools in Boston wrote (1916):

"A fundamental lack in our general high school is the failure of the high school to supply the boys and girls an adequate motive. The general, academic or abstract cultural motive has proved ineffective; we have failed not only to meet industrial needs, but have failed to interest and hold our boys and girls" (p. 38).

Clearly, there needed to be a change in education. And this is only looking at the student perspective. Industry needed skilled workers, agriculture needed a better educated farmer and the home could use an upgrade. Vocational Education could address all these needs; and it did with the passage of the Smith-Hughes Act of 1917. This act provided federal funds to support the teaching of agriculture, home economics and trade and industrial education in the public schools.

In this issue of The Agricultural Education Magazine we have followed the advice given to brides – something old, something new. We have dug into the archives of the Magazine and pulled out some classic articles that merit a second reading. And then we have added a mixture of articles from some of the younger members of the profession.

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What if the Smith-Hughes Act Never Existed?

by Gary Moore

In the classic Christmas movie "It's a Wonderful Life" the main character, George Bailey, is on the brink of suicide because of an errant deposit in the savings-and-loan bank that he manages. This, coupled with various hardships and unfilled dreams of fame and fortune, has him attempting suicide. However, his guardian angel Clarence, rescues him.

In their ensuing conversation George Bailey wishes that he had never been born. Clarence was able to fulfill this wish and shows Bailey what life would have been like in Bedford Falls if Bailey had not been born. The results are disturbing and show a dark, corrupt, nightmarish Bedford Falls without George Bailey. His life did make a major, positive difference in his community!

What if the Smith-Hughes Act had never been passed? What would agriculture and education be like today without this landmark legislation? Let's assume the Smith-Hughes Act never existed and there was no subsequent legislation based on the Smith-Hughes model. While it is a challenge to image life without the Smith-Hughes Act, here are some plausible possibilities.

Stagnant Agricultural Productivity. At the time the Smith-Hughes Act was passed about 70% of the population lived in rural areas and a typical farmer was able to feed only four other people (Kirschenmnn, 2000). Fast forward to the modern era and we see that one farmer feeds around 155 people (Vilsack, 2010). What has contributed to this increase in productivity? Among the many factors contributing to this increase are mechanization, crop hybridization, agricultural chemicals, artificial insemination and biotechnology. However, we also must recognize that the application of modern farming practices was being taught to countless thousands of young people in agricultural classes. These young people were then applying what they learned on the farm.

The Smith-Hughes Act required all students to have "… directed or supervised practice in agriculture…for at least six months per year." (Public Law No. 347, Sec. 10). Students typically grew crops or raised livestock under the watchful eye of the agricultural teacher. Students wanted to do a good job in applying the modern farming practices they were taught. Records from this era show that the crops yields produced by the students were nearly double that of the state average (Uricchio, Moore & Coley, 2013). Many of these agriculture students went into farming. Thus, one immediate impact of the Smith-Hughes Act was increased agricultural productivity. If the Smith-Hughes Act had not existed, it is doubtful that these types of gains would have been made in agricultural productivity.

School Dropouts Would Continue. At the time the Smith-Hughes Act passed, students dropping out of school was a major issue. When students reached the age of 14 they dropped out. They saw no relevance or value in what they were learning. The Smith-Hughes Act contributed to reversing this trend. The legislation clearly stated that vocational education was for those 14 years of age or older. And half of the instruction was to be hands-on. These two facts resulted in students remaining in school.

Heckman and LaFontaine (2010, p. 1) reported that "Throughout the first half of the 20th century, each new cohort of Americans was more likely to graduate high school than the preceding one. This upward trend in secondary education increased worker productivity and fueled American economic growth." It is highly likely that the Smith-Hughes Act, which also established educational programs in home economics and trade and industrial education (in addition to agriculture education) was one of the contributing factors for students staying in school.

In the early days of agricultural education, agricultural teachers were expected to teach three groups of students – the all-day students (students who were in school all day), out-of-school youth (students who had dropped out) and adults (more later). The out-of-school youth were taught when school dismissed for the day or in the early evening. The out-of-school youth were often farming or were unemployed. They

benefitted greatly from the agricultural instruction they received and realized that schooling could be beneficial and interesting. The attitudes of the out-of-school youth helped convince others who might be thinking of dropping out to remain in school.

Reduced Enrollment in Agricultural Colleges. The knowledge and skills learned in agricultural education had an impact on future career decision of students. While many agricultural students went into farming, many others went to college to study agriculture. While taking high school agricultural classes the students learned about careers in such fields as agronomy, animal science, entomology, agricultural mechanics and other areas. They wanted to learn more about these areas and went on to college. The USDA recognized this early on (USDA, 1919). Recent studies (Rocca & Washburn, 2005) verify that agriculture teachers and participation in high school agricultural education does influence students to attend college and major in agriculture. Accordingly, if the Smith-Hughes Act had not existed there would be fewer students studying agriculture in college.

Leadership Vacuum in Agricultural Education. The Smith-Hughes Act stipulated that money for agricultural education could be used to pay the salaries of supervisors. The Act also created a Federal Board for Vocational Education which then employed national supervisors. Both groups provided strong leadership for the development and implementation of vocational agriculture. What had previously been an assortment of state efforts to teach agriculture now became a national uniform effort. Prior to Smith-Hughes the leadership for the agricultural education efforts that did exist was basically non-existent in most states to robust in a few states such as Massachusetts. If the Smith-Hughes Act did not exist, there would be a profound leadership vacuum for agricultural education.

The FFA Would Not Exist. Even though the Future Farmers of Virginia served as the model for the FFA it was the federal supervisors who took the idea, promoted it nationwide, and provided the leadership for the creation of a national FFA organization. Since the Smith-Hughes Act was responsible for hiring the federal supervisors, and they were instrumental in creating the FFA, one could logically say the Smith-Hughes Act was responsible for the creation of the FFA.

Teacher Education in Agriculture Would Not Exist. The framers of the Smith-Hughes Act were adamant that trained, educated teachers were needed. One provision of the Act was that before any money could be used to pay the salaries of the teachers, there first had to be a plan for the training of teachers. Not only was there to be a plan for training teachers, money was given to the states to fund the teacher education efforts. This had to happen first. So teacher training was the foundation for agricultural education. In many states federal funds were used to pay the salaries of agricultural teacher educators for decades after the passage of Smith-Hughes.

Adult Farmers Would Have Fewer Educational Opportunities. The language of the Smith-Hughes Act indicates that instruction was for those "…who have entered upon or who are preparing to enter upon the work of the farm." This was interpreted to mean that agriculture teachers should also teach adult farmers in addition to teaching younger students. Conducting adult farmer classes was a major component of agricultural education for decades and still is in numerous states.

In some states there are active education programs for young farmers. In other states there is intensive instruction for adults in farm business planning and analysis. Farmers have benefitted from this instruction and their farms have become more profitable as a result.

After World War II (and later military actions) agriculture teachers conducted night classes for the returning military under the auspices of the GI Bill. The returning GIs learned how to farm. Without the Smith-Hughes Act, none of these adult education opportunities would have existed.

Other Vocational Programs Would Not Exist. The Smith-Hughes Act not only provided federal funding to teach agriculture, it also supported the teaching of home economics and trade and industrial education. Subsequent vocational legislation added Marketing Education, Health Occupations Education, Business Education and Technology Education to the vocational education portfolio. If it were not for the Smith-Hughes Act, these disciplines might not exist.

Other Educational Legislation Would Not Exist. One of the controversies surrounding the Smith-Hughes Act was whether or not the federal government should be involved in creating educational legislation. Opponents believed that education was the domain of the states and the federal government should not infringe upon that right. States should have the freedom to do what they deemed appropriate in regards to educational policy. If this view had prevailed and the Smith-Hughes Act had not been enacted, then it would be logical that other federal education such as special needs legislation, Title IX and other such legislation would not exist.

Winning World War II Would Have Been Harder. During World War II agricultural education students planted victory gardens, sold war bonds, collected scrap metal and engaged in various efforts to win the War. Since many farm equipment manufacturers were producing equipment for the military, it was up to the agricultural education students to keep the farm equipment in their local communities repaired and running. Many schools started school canneries during this era to preserve food. Without the Smith-Hughes Act, many of these activities would not have happened.

Rural Life Would be Depressing. Over the history of agricultural education there has been emphasis on various programs designed to improve home life on the farm. Students were encouraged to adopt electricity when it became available. Soil conservation practices were promoted. Young people were encouraged to start home libraries and read. Students were encouraged to have supplementary and improvement activities as part of their SAE programs. The living conditions in rural American were improved because of the Smith-Hughes Act.

Student lives would not be changed. I grew up on a 172 acre general livestock farm in Central Texas. My divorced mother had four boys to raise, ranging in age from 12 years old down to 9 weeks old. To say we were poor would be an understatement; but then so were many of our neighbors. I didn't fully comprehend my "deprived" background until years later.

During elementary and middle school I was primarily an invisible student. I was a good student, I didn't cause trouble but I was not a member of the in-crowd. I floated under the radar screen of the teachers. Things started to change in 1961 when I enrolled in Vocational Agriculture at Lampasas High School. The Smith-Hughes Act was still in place.

My agriculture teacher, Jack Lacy, REQUIRED all students to have what we now call a Supervised Agriculture Experience (SAE) program and to be in the FFA. He took a personal interest in me and opened many doors of opportunity for me. I developed leadership skills, won college scholarships, and earned enough money from my SAE to go to college. My life has been changed by agricultural education. That is why I have spent the last 48 years teaching agriculture at the high school and college level.

My story is not unique. Thousands and thousands and thousands of students could tell similar stories. They have all had their lives changed – because of the implementation of the Smith-Hughes Act and the resulting developments.

Conclusion

In the words of George Bailey, it has been a wonderful life. But if the Smith-Hughes Act had not been enacted, the story could have a different ending. The world would be drastically different if the Smith-Hughes Act had never existed.

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THEME ARTICLE

The Men, The Myths, The Legends: Dudley Mays Hughes and Hoke Smith

by Brandon S. Poole and Eric D. Rubenstein

A powerful coalition by several key organizations was necessary to support the passage of the Smith-Hughes Act of 1917. By the turn of the 20th century, it became clear that strong federal vocational legislation was needed to promote the educational system in the United States of America. With such a dire need for vocational funding, the legislation would need support from not only education and agriculture groups, but also from members of Congress. It only makes sense then, in the 100th anniversary of the National Vocational Education Act that we pay homage to the two men who carry the bill's namesake.

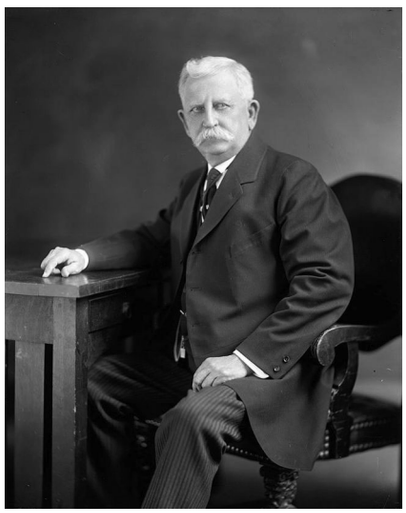
Dudley Mays Hughes, avid Georgia agriculturist and later democratic politician, was born in Jeffersonville, Georgia, and resided there until he attended college at the University of Georgia. Interestingly enough, he never completed his studies in Athens, and instead returned home in the middle of his senior year to try his hand at agriculture. Hughes was masterful at the modern methods of agricultural principles. After a trial run on his grandfather's farm in Laurens County, his grandfather rewarded the young man with one thousand dollars for his excellent work. Hughes used this money to purchase and establish his Danville farm into one of the section's most profitable plantations.

Being from a rural area, Hughes also realized that in order for agricultural operations to prosper, that railroads were an absolute necessity. Dudley Hughes was never a fan of politics in his early life; however, seeing the needs of the community prompted him to take action. With the help of his father, also a local politician, Hughes used his influential stature and prominence to bring railroads to his community to help struggling farmers. With his community behind him, it wouldn't be long until he traded in overalls for business suits.

Although his first run at political office proved unsuccessful, realignment of the districts in the state soon turned in his favor as he was elected to the U.S. House of Representatives, where he would win coveted seats on the House Military, Agriculture, and Education committees. Perhaps the single greatest honor of his political career was when democratic president Woodrow Wilson appointed him to a presidential commission to explore the viability of federal funding of vocational and agricultural education in public schools in 1914. It would be three years later until his work was finally recognized in the form of a bill, alongside another prominent Georgian, Hoke Smith.

> Hughes was masterful at the modern methods of agricultural principles.

Across the hill, Hoke Smith served in the U.S. Senate from 1911-1921. However, he first led Georgia through its progressive movement as Governor of the State from 1907-1911. Originally hailing from Newton, North Carolina, Smith later moved with his family to Chapel Hill, where his father was a professor at the University of North Carolina, before eventually relocating to Atlanta. Hoke Smith came from very humble beginnings. He took a job working for Atlanta Public Schools before eventually reading for a law firm. Despite no formal



Honorable Dudley Hughes

college training, Smith passed the bar exam and started his own law firm. In order to save money, Smith slept in his office at work. This allowed him to save enough money to buy the Atlanta Journal, building it into the archrival paper of the Atlanta Constitution. It was through this career that gave him a platform to enter politics. Aside from the Smith Hughes Act on the national level, other prominent political gains for the State of Georgia were a direct result of Smith's work. He established the Board of Education, increased public school funding, and also worked with Hughes in respect to the railroad commission to grant farmers more access to a national market. He was also a major figure of the introduction and passage of the Smith Lever Act of 1914, which created a national agricultural extension system. The University of Georgia erected the Hoke Smith Annex in his honor due to these major contributions.

While many individuals and organizations came together to create the Smith-Hughes Act of 1917, it is important that we shed light on the two men who stood at the forefront in ensuring students across America could attend school in vocational trades. This impact is still felt around the nation 100 years later. In Georgia specifically, State Executive Secretary for FFA, Ben Lastly says it best: "The work that Hoke Smith and Dudley Hughes did to put vocational education classes in schools has changed history. While today fewer young people are working on the farm, many more are necessary in off farm jobs that impact the food and fiber necessary to feed the world. Since 1917 our world has changed, but there is still a need to prepare young people for the real world and the industry of agriculture. Today we have well over 50,000 students in Georgia alone who take agriculture education classes each year. These are young people who, because of this Act, will be vital to the future of food, fiber, and fuel, and will also be more informed consumers." The work of Hughes and Smith has allowed for thousands of U.S. students to strengthen their knowledge of agriculture and perpetuate the agricultural industry into an ever vibrant, confident, and evolving future.

Hoke Smith

He established the Board of Education, increased public school funding, and also worked with Hughes in respect to the railroad commission to grant farmers more access to a national market.

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Smith, Hughes, Page, and Prosser

by William G. Camp

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In almost any course in agricultural education or vocational education, one thing that is likely to be mentioned is the Smith-Hughes Act of 1917. I suppose that in nearly every graduate course in vocational education I have ever taken or taught, the 1917 Act and its impact on the present form of the profession have been discussed. Vocational educators often attribute the very beginnings of our profession in the U.S. to this single piece of legislation.

If you read all of the theme articles in this issue, you will find that was not the case, and that vocational and agricultural education were already accepted parts of the American educational scene well before 1917, and, in fact, were growing steadily more popular. The Act, however, did establish vocational education as a federal program and provide both the form and much of the substance of vocational education as we have known it over the past 70 years. Indeed, there is general agreement that the passage of the Smith-Hughes Act of 1917 is the most important single event in the history of vocational and agricultural education in America (Camp & Crunkilton, 1985).

We also often speak of Smith and Hughes as though they originated vocational education; whereas, that is certainly not true. This is not to minimize the critical roles played by either of these two men in the passage of this benchmark legislation. However, this article will point out that there are four men whose efforts and influence were largely responsible for the formulation and passage of the Smith-Hughes Act of 1917. And, of those four, Smith and Hughes probably played lesser roles in the action than did the other two.

The Players

Prosser

Charles Prosser was the only professional educator among the four principal players. As a prominent educational leader with experience in industrial education program development, Prosser was hired in 1912 as the first Executive Secretary of the National Society for the Promotion of Industrial Education (NSPIE). The NSPIE had been formed in 1906 for the expressed purpose of securing federal support for industrial education. In that position, Prosser's sole function was to work toward what would eventually become the Smith-Hughes Act of 1917 (Wirth, 1972; Barlow, 1967; Barlow, 1976).

One of Prosser's chief early allies was Senator Carroll Page (R, Vermont), who would propose and fight unsuccessfully for several bills to provide federal support for vocational education over the next few years. Prosser was most influential in the wording of Page's bills and in planning the efforts at their passage.

Because of his leadership in the move toward federal legislation, and as a result of great political pressure from the NSPIE, Prosser was named to the Commission on National Aid to Vocational Education in 1914. Since he had written much of the Page bills, Prosser was in a particularly strong position to influence the Commission's deliberations. It is generally accepted that he wrote the portion of the Commission's Report that later became the Smith-Hughes Bill and later the Act of 1917 (Venn, 1964).

Page

Senator Carroll S. Page, a Republican senator from Vermont, was a disciple of the late Senator Justin Morrill, also of Vermont, whose Morrill Acts of 1862 and 1890 had been so influential in the development of land grant colleges in the United States. It was his desire to leave a legacy of similar accomplishment credited to his name. In 1911, Senator Page assumed responsibility for promoting legislation for vocational education. He immediately formed an alliance with Charles Prosser and began a six-year odyssey of frustrations in a futile attempt to secure passage of vocational legislation under his sponsorship.

In 1916 when the Senate was preparing to vote on the Smith-Hughes Bill, Senator Hoke Smith rose to pay tribute to Senator Page's work and leadership in the formulation of the legislation. Smith specifically indicated that, but for the Democratic majority resulting from the 1913 election, Page would have been in charge of the bill. By direct implication, he thus conceded that the bill would have been the Page Bill.

Senator Page appears to have been a good-hearted, but rather ineffectual parliamentarian who was out-maneuvered repeatedly by the wily Hoke Smith. On the other hand, one wonders whether Page could have ever succeeded in securing the passage of the bill without Smith's support.

Smith

Hoke Smith was governor of Georgia during the early part of the century and was a supporter of vocational education as well as a strong advocate of rural interests in general and agriculture in particular. In 1908, while governor, he spoke on both subjects to a meeting of the National Society for the Promotion of Industrial Education (NSPIE), expressing strong support for vocational education. Later, as a Democratic senator from Georgia, he proposed legislation to establish the Cooperative Extension Service (the Smith-Lever Act of 1914). As a result of the election in 1913, of a slight Democratic majority in the Senate, he was named chairman of the Senate Committee on Education and Labor. He also prepared the legislation creating a Commission on National Aid to Vocational Education in 1914. As a result of his involvement in vocational education, his chairmanship of the relevant Senate committee, and his role in the establishment of the Commission, Senator Smith was appointed chairman of the commission, putting him in a pivotal position for formulating the later legislation. On December 7,1915, he introduced Senate Bill 703 (later to become known as the Smith-Hughes Bill) and it was referred to the Senate Committee on Education and Labor. Senator Smith was a very powerful and influential member of the Senate, being generally regarded as a skillful parliamentarian and political strategist.

Hughes

Representative Dudley M. Hughes was a Democratic Congressman, also from Georgia, and Chairman of the House Committee on Education during this time frame. Hughes was well known in his home state for his support of agricultural education both at the college and secondary levels. His efforts in 1905 were instrumental in the expansion of the use of agricultural clubs as an instructional tool in agricultural education (Dudley M. Hughes Vocational School, 1955.)

Because of his influential position on the House committee and his long-standing support for industrial education, he was also appointed by President Wilson to the Commission on National Aid to Vocational Education in 1914. He introduced House Bill 11250 on February 10, 1916, as the Smith-Hughes Bill. Representative Hughes was also known as a skilled parliamentarian and politician (Barlow, 1976).

The Maneuvering

Between 1900 and 1917, at least 38 Senate and House bills were offered pertaining to vocational education (Hawkins, Prosser & Wright, 1966). Two of those were the Dolliver Bill (S.4675), introduced in 1908, then reintroduced as the Davis Bill (H.R. 20374) in 1910. When Senator Dolliver (Iowa) died in 1910, the newly elected Senator Page reintroduced the Dolliver Bill in 1911 as the Page Bill (S.3). Representative Wilson (Pennsylvania) submitted the companion bill in the house (Hawkins, et al, 1966). During the succeeding months, a number of serious flaws surfaced in the bill and Senator Page introduced numerous changes. Some of the changes appeared to be poorly thought out. As a result, it began to become apparent that, although there was widespread support for vocational education in the country and in Congress, the Page-Wilson Bill might not be successful. Even the NSPIE and the United States Commissioner of Education could not support the bill in its original form (Bennett, 1937; Barlow, 1967; Barlow, 1976).

In 1912, Senator Smith introduced the agricultural extension bill in the Senate and Representative Lever (South Carolina) introduced it in the House. During the ensuing deliberations, it became clear to Smith that the passage of both bills in the same session of Congress was unlikely. Since his first loyalty was to the agricultural extension bill, the Senator from Georgia succeeded in undermining the Page-Wilson Bill through a series of brilliant parliamentary maneuvers. At one point, he managed to get the provisions of the Page-Wilson Bill incorporated into the Smith-Lever Bill, then, just as quickly dropped it from his extension bill. This move, coupled with the rather careless steps by Page, resulted in the Smith-Lever Bill's becoming the more passable of the two (Barlow 1976; Bennett, 1937).

Smith then proposed a compromise to Page and Prosser. He suggested that they support the Smith-Lever Bill, in exchange for which he would propose a Commission on National Aid for Vocational Education, and his subsequent support for a vocational education bill in the next Congress. The deal was struck, and the

Smith-Lever Act of 1914 established the Cooperative Extension Service (Venn, 1964). The Commission was established in 1914, and the Democratic President Wilson appointed Senator Smith to chair it, with Page, Hughes, and Prosser among its members (Barlow, 1976).

Prosser largely wrote the part of the report that was later enacted. It was basically a revision of the Page-Wilson Bill, with some of the problems that had been included in the earlier document worked out. Because Senator Smith was chairman of the Commission, his name was attached to the report. Because it was "his report," he introduced the recommended legislation under the unofficial title of the Smith Bill in the Senate.

As chairman of the relevant committee in the house, Representative Hughes submitted the House bill. Thus, it became the Hughes Bill instead of the Wilson Bill in the House of Representatives.

Since Senator Page had been such a vocal advocate of the legislation for so long, he supported the bill regardless of the fact that Smith was literally simply resubmitting Page's work with modifications. Thus, according to Barlow (1976), Hoke Smith prevented the passage of federal vocational education legislation in 1914. He managed, though, to secure passage of the agricultural extension bill. Then he took over Page's work and put his own name on the bill.

At the same time, we must recognize that Hoke Smith and Dudley Hughes were long-time supporters of vocational education (Bennett, 1937; Hawkins, et al, 1951; Hawkins, et al, 1966). They had both worked for passage of vocational education legislation before the appointment of the Commission in 1914. Further, a close reading of Barlow (1976) leads me to conclude that Senator Page might well have been unable to successfully maneuver the legislation through Congress. Although well-intentioned he appears to have been rather naive and unskilled as a legislator.

Conclusion

There were many education, industrial, political, and other leaders advocating federal vocational legislation during the first 17 years of the 20th century. While the concept was generally supported, the specific details were more heartily debated. Four of the champions of such legislation were Hoke Smith, Charles Prosser, Dudley Hughes, and Carroll Page. Page, a senator from Vermont, was an early, albeit, somewhat ineffective legislative leader in the fight. He relied heavily on the advice and assistance of Prosser in formulating his proposed legislation and political moves regarding the bill.

Prosser was a professional educator who was hired to act as a full time lobbyist by the National Society for the Promotion of Industrial Education and to lead the fight for federal vocational legislation. He relied heavily on Page for access to the legislative process until 1915 when it became clear that Hoke Smith would be a more effective ally.

Smith and Hughes, Senator and Representative from Georgia, respectively, were the architects of the passage of the Smith-Hughes Act of 1917. The contributions of these two men in formulating the legislation may be questioned, but their role in securing its passage cannot.

It is unfortunate that history should have so nearly forgotten the roles of Dr. Charles Prosser, and to a greater extent, Senator Carroll Page in shaping of federal policy and support toward vocational education since 1917. Regardless, the legacy of these four great leaders has served America and our society well.

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THEME ARTICLE

Ahead of Their Time: The Lasting Impact of Mississippi's Agricultural High Schools

by Gaea Hock, Mary Helen Lett, and Gayle Fortenberry

My husband and I (Gaea) love to go to estate sales and auctions. You never know what treasures will be uncovered! Shortly after moving to Mississippi to begin my tenure at Mississippi State University as an assistant professor of agricultural education we attended an auction in Starkville, MS. It was a cold day in December so there weren't many people in attendance. The auction was getting close to being finished when, out of the corner of my eye, I spotted a framed diploma. I kept my excitement well-hidden as several items prior to the diploma were sold. Finally, I won the bid and paid $6 for a diploma from Bolivar County Agricultural High School belonging to Lela Bell Dean dated May 21, 1918.

While this document may seem insignificant to some, I wanted to own a piece of Mississippi agricultural education history. Little did I know that this small antiquity would reveal to me the influence vocational agriculture had on the development of Mississippi's education system.

Bolivar County Agricultural High School diploma dated May 21, 1918 purchased by Dr. Hock at an auction for $6.

Before Smith-Hughes

The Smith-Hughes Act of 1917 is an important piece of our agricultural education history, but Mississippi began work to educate their rural youth in the early 1900s. Challenges facing the rural parts of the state such as poor roads, few automobiles, and insufficient schools led to the development of agricultural high schools.

In 1908 the Mississippi Legislature passed laws that permitted counties to establish agricultural high schools in order to provide better educational opportunities for the state's rural students. The legislation was written to allow county school boards to establish boarding agricultural high schools, offering agriculture for boys and home economics for girls, as well as a full academic curriculum. While the original law only included schools for white students, the law was revised in 1910 to include African American children as well.

Bolivar County Agriculture High School and Forrest County Agriculture High School were among the first agriculture boarding schools to open in 1911, and by 1921, 51 agricultural high schools were in operation. This was a great accomplishment in a state that has only 82 counties. Coahoma Agricultural High School, the first of such schools for African-Americans, opened in 1924.

Forrest County Agricultural High School began in 1911 when four families each donated 80-acres to establish the 320-acre campus.

The schools were unique in that they had dormitories on campus. This allowed the children to remain on campus during the week. They did not charge tuition, but did charge a small fee for room and board ($10 per month in 1918 at Hinds County Agricultural High School). Students could earn money to pay their boarding fee by working on the school farm or other locations on the campus.

Transition Time

The golden era for agricultural high schools in Mississippi did not last long. By the early 1920s, the total number of public schools in Mississippi exceeded 750. The state legislature began to consolidate schools as early as 1916 and by the 1920s many agricultural high schools were no longer open.

However, the Smith-Hughes Act of 1917 allowed many of the consolidated high schools to continue offering vocational agriculture courses.

Through modernization of the automobile, students were able to be transported longer distances and the options for rural students increased. This led to no additional white-only agricultural high schools after 1919, two programs closing before 1923, and many schools closing their on-campus living facilities.

To avoid closure or consolidation, leaders of some of the agricultural high schools developed a solution. These schools would begin to offer one or two years of college courses to their students, while still providing affordable access to a quality education for rural students. Hinds County Agricultural High School and Pearl River County Agricultural High School were the first to start offering both high school and college classes to their students as early as 1921. These programs were able to maintain their enrollment while offering college classes to a population that would not normally have access to higher education. This led to the agricultural high schools in the state helping establish a robust community college system in Mississippi.

In 1922, the Mississippi Legislature enacted a law that allowed qualified agricultural high schools to extend their curricula and offer college courses. The agricultural high school had to meet certain criteria including a geographic distance from the existing senior colleges in the state (one of which was Mississippi State University), highly-qualified teachers, and admission criteria for students.

While the number of agricultural high schools decreased, the new junior colleges in the state rose to meet the challenge of providing "quality, accessible, and inexpensive education for the state's students" (Fatherree, 2010, para 10). These community colleges continue to educate youth and adults in the rural parts of the state.

By 1928, "ten Mississippi agricultural high schools were offering at least one year of college courses and two more were scheduled to do so in the fall of that year" (Fatherree, 2010, para 11). In an effort to limit the number of junior colleges in Mississippi, the state was divided into 13 districts in 1928 with only one junior college in each. The work done in Mississippi led it to be the first state system of junior colleges in the U.S. Today, there are 15 community colleges in Mississippi, 14 of which began as an agricultural high school.

The Last of Its Kind

Currently, Mississippi has 148 school districts and 117 high school agriculture programs. Only one of the original agricultural high schools remains active today. Open for 105 years, Forrest County Agricultural High School, in Brooklyn, still works to meet its original mission.

Forrest County Agricultural High School was one of the first agricultural high schools in the state of Mississippi. It is the last remaining school of its kind.

Forrest County Agricultural High School (FCAHS) was established in 1911 when four local families each set aside eighty acres to provide the land for the school. Community members saw a need for students to learn hands-on skills and trades in addition to the traditional academic opportunities. That tradition continues to this day as FCAHS proves to be one of the most diverse and successful districts in the state. FCAHS was recently rated an A district and was named the third highest-ranking school district in Mississippi (Forrest County AHS, n.d.).

Students from all walks of life have roamed the campus over the past century. While FCAHS no longer operates as a boarding school, this option was allowed until 1989. Students from all across the state, as well as hundreds of international students, have graduated from FCAHS. Each spring, hundreds of alumni return to campus for the annual homecoming celebration, where old classmates and roommates reminisce about their time at FCAHS. Many of these alumni will tell stories of working in the school's dairy barn, as the boys were in charge of the farm while the girls learned about homemaking. Many could tell you about practical jokes played in the school dormitories, of which students often worked to pay for their room and board. While much has changed over the past century,

one thing still remains the same—students are receiving a quality education with opportunities for real-life experiences and hands-on learning.

As the only remaining independent agricultural high school with an active FFA chapter in Mississippi, students 'learn to do' in a variety of ways at FCAHS. The school's 320-acre campus boasts an extensive livestock program consisting of a commercial cow-calf herd, meat goats, hair sheep, horses, and hogs. Many of the students use school-raised animals to compete in local and regional livestock shows. The horticulture program has two greenhouses, a high tunnel house, and has recently transplanted more than one hundred blueberry bushes. About 600 students attend FCAHS and each year 160-170 of them take an agriculture class in one of the three agriculture tracks (Introduction to Agriscience, Horticulture, and Agriculture & Natural Resources) all of which offer science credits.

Students are involved in every aspect of the day-to-day operation of the farm and play a large role in its success. Whether it is vaccinating animals, building fence, planting gardens, or cutting hay, students really get a clear understanding of what a typical producer might go through on a daily basis. Students even help palpate cows and manage the greenhouse when it is time for the annual plant sale. These unique resources allow the three agriculture teachers at FCAHS to share the ultimate learning experience that encompasses hands-on instruction and the intent of the Smith-Hughes Act.

It doesn't take long for a newcomer to realize that Forrest County Agricultural High School is a special place. Students and staff alike take pride in the school and hold tightly to the traditions that have served as the foundation of excellence. Even though the school was founded before the Smith-Hughes Act, this legislation played a large role in its success, as well as affording youth across the nation these same unique opportunities for experiential learning and career success.

Leaving a Legacy

The Smith-Hughes Act is an important piece of legislation in agricultural education history. In some states it helped create secondary vocational education, while in others it provided additional funding to support existing efforts. As our profession reflects over the past 100 years, we have the opportunity to appreciate how far we have come and where the next century will take us. Mississippi agricultural education has adjusted and is still working to provide the training and education to future agriculturalists.

While I never met Lela Bell Dean and Bolivar County Agricultural High School has long since closed, I am proud to own a piece of agricultural education history and often look at the diploma in my office as a sign of where we have been and how far we have come. It is important we take time to reflect on our accomplishments as we prepare for the next century of agricultural education.

FCAHS has a working farm as a component of the agriculture program that includes cattle, goats, sheep, hogs, and horses.

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Mary Helen Lett (Photo Credit Mississippi Farm Bureau Federation) is an agriculture teacher and FFA advisor at Forrest County Agricultural High School in Booklyn, Mississippi.

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THEME ARTICLE

The Philosophy of The Smith-Hughes Act – Then and Now

by Cayce Scarborough

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Background

The Smith-Hughes Act was six years old when I enrolled in vocational agriculture. In this small, rural high school the boys were in agriculture and the girls were in home economics, required elcctives. The agriculture curriculum was a 4-year program built around agricultural subject matter with a full year devoted to each of the following areas: field crops, animal husbandry, horticulture, and farm management. We had state approved textbooks, but much use was made of the large supply of bulletins from the state agriculture college and the USDA.

Shopwork, with heavy emphasis on practical farm repair jobs, was an important part of each year. Needed bookcases or kitchen cabinets were built, but "fancy woodwork" was discouraged. A hand-turned forge was the key to metal work for repairs, sharpening plows, or making needed metal parts.

A supervised farming program, including crops and livestock as well as home improvement projects, was required of each student. The scope of the farming program was usually small, but ownership, work, and management were emphasized. The teacher visited regularly to see if improved practices were being done and records were up-to-date. He also helped get these things done by bringing along equipment from the department if needed, such as the farm level for laying out terrace lines. A demonstration year-round garden as well as fertilizer for crops were seen on the one acre laboratory area at school. Neat signs helped tell the story of improved farm practices. Much emphasis was on up-to-date farm practices.

Although all of us enrolled were supposed to be farmers in the future, we had no Future Farmers of America. The FFA had not been invented.

Night classes for farmers rounded out the local programs. The agriculture teacher was the only person on the job 12 months, so keeping the school grounds was often his job. I had two teachers during my four years (1924-28), one from Mississippi State University, the other from Auburn University. They were most influential in helping me get started on my life's work. I am indebted and grateful to them.

I give you this background so that you will know, as they say, "where I come from" in discussing the philosophy underlying the Smith-Hughes Act.

Underlying Philosophy

Space permits looking at only two ways of arriving at the philosophy at work in a program or organization, namely (1) The Official Position and (2) What's Actually Going On.

First, the stated purpose, objective, goals, or philosophy may be written as part of the description of the program or organization. This may be the source of the "Official Position", although individuals sometime shape the program. In this case, we have the Smith-Hughes Act and its background. What was being taught in agriculture before? Why did the Smith-Hughes Act come into existence? What were the conditions that brought about and made possible the passage of such national legislation? Senator Hoke Smith (GA) and Congressman Dudley Hughes (GA) (Hooray for Georgia!) and their colleagues must have thought that the legislation would be good for the country. The answers to these and similar questions would give us the philosophy underlying the Act. Not having these we can study the Act itself as well as the publications dealing with the implementation, such as Policy Bulletin Number 1, a most influential document. Beginning as a policy bulletin, it became a list of Rules and Regulations. In fact, these words appeared on the cover of the revised editions of the bulletin.

Looking at these publications, the conclusion must be reached that the guiding purpose of any program of vocational agriculture under the Smith-Hughes Act was

clearly **Establishment in Farming**. This was the "Official Position" all through the early years and in later years as well.

How About Locally?

What was happening out in the field was a different story; many reasons making good sense to the local teacher. This leads to the second way of arriving at the philosophy underlying a program or organization. To many people, what is actually happening in a program or organization on a day-to-day basis really reveals the philosophy rather than some state position. At any rate, it seems clear that establishment in farming was not the key to local programs. Many reasons, one of which was the fact that opportunities for establishment were very limited or non-existent in the community. In fact many departments would never have been established had this been the major purpose, including where I was enrolled which was a community of small landowners. However, there existed many needs which were set by these departments, a major one being improvement of farming and farm life and helping the boys enrolled begin to find their own way in their life careers. The key to the latter was "learning to do by doing." These boys saw a wider world and caught a new vision for themselves.

So, in the early years many dedicated agriculture teachers (they were called Smith-Hughes men in some sections) had major and positive impact on the local community where they worked. Being on the job year-round and visiting in the homes of those enrolled, they became leading citizens with respect and support within the community. Many spent their life in the same community where they went as a young agricultural education graduate just out of the agriculture college. The underlying and guiding philosophy of most of these early teachers was improving farming and farm life in the community and helping the boys enrolled learn and practice the best that was known in agriculture while also developing himself personally while learning to do by doing.

What About Now? If I compared "now to then," I'd sound like the old man that I am talking about "the good ole days!" So, I will mention some of the things that may have caused changes in the local situation, "forcing" a change in philosophy whether desirable or not. A related question is whether changes made in the programs resulted in more valuable programs for the people enrolled and the communities. For example, a question for discussion in a workshop on the subject might be, "Did the original ideas for vocational agriculture under The Smith-Hughes Act fit the '20s better than the '80s?" There could be some strong arguments for "Yes", such as the small, rural high school of the early years vs. the large consolidated, possibly urbanized high school of today. Certainly, it would be difficult to make a case for establishment in farming as a guiding purpose for many programs today.

Looking back through the years, it seems obvious that establishment in farming as the guiding purpose for programs in vocational agriculture was never realistic in theory nor practice. The same can be said of the modern version of enrolling students in occupational categories. That is, the assumption that all enrolled in this category are headed for a career in that category. Many good reasons - a major one being that it is not good vocational guidance to have a 14-year old commit himself/herself to a career at the age of 14. Too young, too lacking in career skills and understanding of self and the world of work. In vocational agriculture, we insist on knowing and using the latest research on feeding livestock or fertilizing crops, but we ignore research done in career choice and decision making. There is much research and theory on developing career patterns that would be helpful in working with young people enrolled in any vocational program.

Another questionable practice developed has a bearing on this problem. That is, a large number of studies were done dealing with the placement of students. Emphasis was given to the percentage of the graduates of these programs who were in "occupations related to their "training." While this might be a major evaluation of a specific course such as auto mechanics or welding, establishment in farming is quite a different matter. (Even the more specific courses might well be taken for purposes other than a life's work, such as learning to service your own car for pleasure and economic reasons.)

These items are mentioned to illustrate a possible flaw through

the years of adopting an "official position" that was not realistic in theory or practice. Using the ad of a national automobile as a guide, we might ask the question, "Have you tried getting established in farming lately?" This is not a new condition. Many years ago, there was some controversy generated about an article in The Agricultural Education Magazine based on a follow-up study that indicated that the more years a boy spent in vocational agriculture, the less likely that he would farm!

The extreme importance of supervised practice as the key to learning to do by doing was lost along the way. In many programs, this was no longer a requirement in the continuing increase in enrollments. One extreme example saw a department grow from one teacher and about 40 students to more than 200 with two teachers with no increase in facilities and equipment and no requirements for supervised practice.

In our efforts to broaden our programs and update them too, we lost the value of supervised practice. Remember our slogan, "Agriculture is more than farming. In spite of some outstanding Agriculture Co-op programs in Kentucky, Ohio, Virginia, and elsewhere, we never managed to make the Feed & Seed Store the learning -to-do station that it could and should have been. Too many of the efforts in this area at best were working jobs and no relation to classwork and career plans. Therefore, I suggest that some or our efforts to modernize vocational agriculture were not effective because we were unable to develop challenging supervised practice programs related to classwork and geared to the needs of the individual student.

The final area of influence to examine is that of curriculum materials and development. This has been a major area of change used by leaders in most states. Some states spent much time, effort, and money to help teachers update or change their curriculum. Oklahoma is an outstanding example of this, especially including many teachers in the process. Evidence indicates that these efforts made for more effective local programs.

Another development impacting on curriculum was the development nationally of the Occupational Categories, with the reporting of those enrolled in these categories as headed for careers in that category. This was a questionable jump from what started as subject matter areas. Some states struggled with 12 or 15 of these categories trying to furnish teaching materials for each. Teachers were confused and so were students, some giving up and going back to the old Agriculture I, II, etc. Again, this was an effort doomed to failure because the implementation was so difficult as well as of questionable value as an approach to curriculum. The extreme job analysis adopted by some had some similar difficulties for the busy teacher. "Majoring in the minors" is the way one teacher put these efforts.

Conclusion

In trying to make a summary statement after taking a philosophic look at vocational agriculture as developed under The Smith-Hughes Act and further legislation, I came to this conclusion. The people-oriented (looking at the individual enrolled) programs in vocational agriculture through learning by doing through supervised practice have been good for this country and invaluable to the many (including me!) who have found their way in life as a result of being a vocational agriculture student. Thanks to the Smith-Hughes Teachers!

Dr. Scarborough, at the time he wrote this, was a Professor Emeritus of Agricultural Education at Auburn University and North Carolina State University. He is now deceased.

Shaping Our Way

by Kaille Morris

How did we get to where we are today in Agricultural Education? On February 23, 1917, the Smith-Hughes Act was signed into law to provide federal funding for establishing vocational education in the public schools established around the country. Senator Hoke Smith and Congressman Dudley Hughes first introduced this watershed legislation and with the help of Congress passed this bill in February of 1917. This was not however the first act passed to promote Agricultural Education. The United States Department of Agriculture was originally established to improve agricultural production, but several different acts followed that expanded the education provided to farmers and students that intended to go to work on family farms.

The U.S. Department of Agriculture was established by Abraham Lincoln on May 15, 1862. The original objectives of the Department were to expand production and variety, along with improving income through collection and to disseminate information about agriculture as well as new plants and materials (American Farm Bureau Foundation for Agriculture, 2007). Isaac Newton of Burlington County, New Jersey, was nominated by President Lincoln to serve as the first Commissioner of Agriculture. Newton's first annual report contained the objectives he felt the department should have aligned with the objectives assigned by Congress. The agriculture legislature that was signed and involved the department, changed the face of American agriculture as well as the educational system (Rasmussen, n.d.).

The Homestead Act was signed into law on May 20, 1862. This provided U.S. citizens and intended citizens such as immigrants and natives to the territories, the ability to file an application, improve the land, and then record a deed to the land. The application was for 160 acres of land that was surveyed by the U.S. Government. The homesteader had to agree to live on the property in a 12 by 14 foot dwelling and grow crops for five years. After this time, they could file for the deed by showing proof of residency and the required land improvements. The land could also be purchased after six months with trivial improvements at the standard price of $1.25 per acre. These claims were reviewed before the claims were granted. There was a loophole in the language of the act because it did not specify inches or feet and some took advantage of this. The homesteaders faced many trials of drought, blizzards, and insects that created problems for the improvement efforts, consequently there was nothing to provide an education to these people to help them overcome the problems they faced (Potter & Schamel, 1997).

The Morrill Act of 1862 soon followed on July 2nd of 1862. This act established Land Grant colleges and universities in each state. One must remember that this legislation was passed after the southern states had seceded from the Union. A total of 30,000 acres of public land was provided to each state for every Congressional delegate. Proceeds from the sale of the land were used to endow the establishment and operation of the Land grant colleges. Senator Justin Morrill of Vermont was given most of the credit for this act, however Spokesman Jonathan Turner of Illinois developed the original idea of universities to train industrial workers on all subjects, for all classes of students. His idea was heard by the Farmer's Convention who called for a university to be developed in Illinois. It was at the time Justin Morrill became aware of the idea and became the main advocate through the federal legislature for aid to these programs (Herren & Hillison, 1996).

In 1875 Connecticut developed an agricultural experiment station in Middletown under the supervision of Wilbur Atwater. The station was used to collect new information on various topics and then provided that data to the land grant university to further improve education. This station was moved to New Haven two years later with Samuel Johnson as director. There were 13 other states that adopted this idea and some even passed legislature at the state level to connect these stations to universities. In 1887 the Hatch Act was signed into law by President Grover Cleveland to provide $15,000 annually to each land grant university to develop and support an experiment station. These stations provided continual investment and improvement in agricultural sciences and technology. The act stated that the research conducted at these stations should recognize "the varying conditions and needs of the respective states (Benedict & Morrison, 2012)." This meant research

must be relevant to the citizens of each state and because of this people and the world have benefitted tremendously from these stations (Benedict & Morrison, 2012). Experiment station research provided new knowledge, but did not provide a way to get the newly discovered research to the production farmers.

In 1890 the Land Grant Universities added 16 new schools from the southern states and new states to the Union. The Second Morrill Act was signed by President Harrison on August 30th in 1890. The 1890 Act allowed for the creation of additional land grant universities, primarily for African-Americans in states where the 1862 land grant colleges had discriminatory admission practices. This grant did not provide federal lands to these universities, however they were granted the same legal standing as the 1862 schools (1890s Land Grant Universities, 2015) and monies were made available for their operation (however the state legislature was to decide how the money would be split in states with two institutions) (True, 1929).

Now that these schools were created to educate agriculturists and were performing scientific experiments on a variety of crops, there was no way to distribute this information to the common people. There needed to be a connection from the university to the farmer. To resolve this gap, the Smith- Lever Act created the Cooperative Extension Service in 1914 to extend research programs to rural Americans to educate them through the land grant universities. This act was based on the cooperative plan developed by Senator Hoke Smith of Georgia and Congressman Ashbury Lever of South Carolina.

As each of these legislative acts passed they provided the foundation for the Smith-Hughes Act. The Department of Agriculture identified that there was a need to be filled to improve life for our citizens and to ready people for careers in the industry that were developing during the period. Due to these major legislative acts, we have developed to include over 73 land-grant colleges and universities. Each of these schools educate a wide variety of students from different walks of life. These students were and now are the future generation of agriculturists who will continue to build on what has already been established and spread their knowledge of agriculture around the world. Agricultural education was shaped by wise and brave people such as Justin Morrill, Hoke Smith, Dudley Hughes, Ashbury Lever, and many more.

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THEME ARTICLE

The Status of Agricultural Education Prior to the Smith-Hughes Act

by Gary E. Moore

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Barbara Mandrell sings a song titled "I Was Country When Country Wasn't Cool." Back in 1917 many agricultural teachers could have sung a modified version of that song, "I Was An Agriculture Teacher Before Smith-Hughes." Many people believe the teaching of agriculture was started with the passage of the Smith-Hughes Act of 1917. The fact is, the teaching of agriculture was well established before the passage of the Smith-Hughes Act. In the 1914-15 school year, a couple of years before the passage of the Smith-Hughes Act, agriculture was taught in 4,390 secondary schools to 85,573 secondary students (U.S. Commissioner of Education, 1916). This article describes the development of agricultural education before the passage of the Smith-Hughes Act.

When was Agriculture First Taught?

When the Pilgrims landed at Plymouth Rock in 1620, they knew little about the Massachusetts soil or crops. Squanto, the Indian, knew both and came to the aid of the Pilgrims by teaching them how to plant corn and fertilize the crop. He told the Pilgrims, "In these old grounds corne without fish" would "come to nothing." He also taught them when, where, and how to get the fish (Stimson and Lathrop, 1942, p. 178). One could claim that this was the beginning of the teaching of agriculture in America.

To identify when agriculture was first taught in a more systematic, scientific fashion, one would look to Georgia. Before sailing for the new world, James Ogelthorpe planned a definite system of agricultural education for the colonists. The plan provided for:

1. Using the agricultural practices of the Indians who inhabited Georgia.

2. Establishing an experimental farm for trying out new crops and discovering effective cultural methods.

3. Providing special instructors and training in agriculture for all the colonists.

The plan was followed. Tomochichi, leader of the Yamacraw tribe, taught the colonists how to grow maize, beans, melons, and several types of fruit. A 10 acre experimental garden was established in Savannah. The trustees of the Georgia colony in 1732 selected three Italians to settle in Georgia and instruct the people in the production of raw silk. These men were the first to be hired as teachers of agriculture. They arrived in Georgia in 1733 and proceeded to instruct the people in the production of silk, primarily through an apprentice system. They received $125 per year and were given 450 acres of land at the end of four years of service. The three Italian teachers were followed by men hired to teach indigo production and grape culture (Wheeler, 1948).

The first agriculture to be taught in a school setting occurred in 1734 in Georgia. The Salzburgers established an orphan's school near Savannah where agriculture was taught. This was followed by another orphan's school in 1738 at Savannah that ". . . taught pupils to work so as to be able to earn their own living from farming" (Wheeler, 1948, p. 12). Most of the agriculture teaching in schools during the remainder of the 1700s and early 1800s was primarily in schools for orphans or in missionary schools.

During the latter part of the 1700s, agricultural societies were established in many states, the first two being in Philadelphia and South Carolina in 1785. The societies promoted the study of agriculture through a variety of activities such as discussions, experiments and publications (Ellsworth, 1968).

In the early part of the 1800s, the teaching of agriculture emerged in a number of private schools. The Gardiner Lyceum, a school devoted exclusively to agriculture, was established in Maine in 1821. Agriculture was also taught at the Rensellaer School in New York which was established in 1824 (True, 1928).

Agricultural instruction in private schools and through agricultural societies flourished during the first half of the 19th century

but declined during the War Between the States.

Federal Involvement

The Morrill Act of 1862 provided for the establishment of one college in each state where agriculture, along with other subjects, was to be taught. While the long term effects of this legislation were beneficial to agricultural education, the short term effect was not. Hamlin (1949, p. 418) observed that, "Those interested in agricultural education centered their attention for many years before and after 1862 upon getting state institutions for agricultural education established and functioning, and attention to agricultural education in the secondary schools languished." After the passage of the Morrill Act many people were of the opinion that there was no need for instruction in agriculture in the public schools because any student who wanted to learn agriculture would go to the land grant college.

Not much interest was shown in agricultural education at the secondary level until after the passage of the Hatch Act in 1887. The purpose of the Hatch Act was "... to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture and to promote scientific investigation and experiment respecting the principles and application of agricultural science." Most people think the Hatch Act only established agricultural experiment stations; that is partially correct. The agricultural education aspect of the Act, the diffusion of useful and practical information, was taken seriously by the early agricultural leaders.

During the 1890s the Office of Experiment Stations in the U.S. Department of Agriculture started an active campaign in different parts of the country to promote agriculture in the public schools. The Director of the Office of Experiment Stations, A.C. True, advocated the establishment of courses in agriculture in schools near the farmer's home. In the Yearbook of Agriculture for 1901 (p. 135), True urged the farmers to ". . . take an active part in this movement (educational reform), impress upon the schoolmen their (the farmers) real education needs, and help to adjust the public schools to the advancing requirements of agriculture."

In 1901, Dick Crosby was added to the staff of the Office of Experiment Stations as a special assistant to the director in work related to agricultural education. For the next decade Crosby, True, and the Office of Experiment Stations were the banner carriers for the agricultural education movement. They were instrumental in getting the NEA to support agricultural education. Reports on the status of agricultural education were published, bulletins designed to help teachers with subject matter were developed, lantern slide series were prepared, presentations were made, and a model curriculum was developed. Nearly every issue of the USDA Yearbook of Agriculture from 1901 to 1913 contained an article by either Crosby or True describing the current work in agricultural education and advocating even more effort. Farmers were urged to ally themselves with their counterparts in the cities who were promoting industrial education.

Agricultural Education in Special Schools

The efforts of True and Crosby, the farmers, and others interested in agricultural education bore fruit. In the 30 year period between 1887 and 1917, the growth of agricultural education could be described as phenomenal.

In some states special agricultural schools of less than college grade were established on the campus of land grant colleges. In 1888, after widespread dissatisfaction with the teaching of agriculture at the University of Minnesota, a school of less than college grade was established on the grounds of the agricultural experiment station. The school was very successful. This type of school was soon found in other states. In 1915-1916, the Bureau of Education listed 24 land grant institutions as maintaining secondary schools or secondary courses of agriculture covering from one to four years.

The secondary agricultural schools associated with land grant colleges were well received but did not meet the educational needs of the population since there was generally only one secondary agricultural school in each state. Because of this, special agricultural schools were established in some states in each congressional district (Alabama [1889]), Georgia [1907], Virginia [1908]); state supreme court judicial districts (Oklahoma [1908]); or in

some type of county or district scheme (Wisconsin [1901, 1909], Michigan [1907], Mississippi [1908], Arkansas |1909], North Dakota [1911], and Massachusetts [1913]). These schools often had dormitories to board the students and operate school farms.

Around the turn of the century, agriculture was also taught in normal schools. Normal schools were institutions designed to train teachers (normal is derived from a French word meaning model). Normal schools were generally state, county, or city supported. The curriculum was two years in length and consisted of a review of the subjects taught in common schools plus some courses in teaching. The students typically were common school graduates (8th grade) with some having a high school education. To prepare the teachers to teach agriculture, courses in agriculture were implemented in a number of these schools. Agriculture was being taught in 124 public normal schools by 1915-16.

Agricultural Education in Public Schools

The greatest growth in the teaching of agriculture prior to the passage of the Smith-Hughes Act occurred in the public schools of the various states. The forerunner of agricultural education was nature study and school gardens, primarily in the elementary schools. A leader in the nature study movement was Liberty Hyde Bailey of Cornell, who in 1896, prepared a bulletin titled How a Squash Plant Gets Out of the Soil. A number of bulletins on various aspects of nature study followed during the late 1890s and early 1900s (True, 1928). Elementary school teachers made extensive use of the nature study bulletins and often formed junior naturalist clubs. In most of the nature study materials there was a distinct agricultural flavor.

Along with nature study, the school gardening movement provided impetus for the study of agriculture. Beginning around 1900 school gardens were planted to both beautify the school grounds and to be used for teaching purposes at the elementary level. By 1903 the school garden movement was well established in 21 states (Crosby, 1903).

The nature study movement and the school garden movement evolved into the teaching of agriculture in the elementary schools. However, because of the inadequate knowledge of agriculture on the part of most elementary school teachers and the crowded elementary school curriculum, it was realized that the teaching of agriculture should be in the high school.

The growth of agricultural education in high schools started in about 1906. Individual states started passing laws requiring the teaching of agriculture in the high schools. Federal legislation was passed in 1907 (Nelson Amendment) that allowed land grant colleges to use federal funds "....for providing courses for the special preparation of instructors for teaching the elements of agriculture..." Starting in about 1908 the number of high schools teaching agriculture started rising rapidly. Between 1908 and 1910 the number of schools doubled, between 1910 and 1912 the number of schools tripled. In 1912, Crosby (p. 471) wrote, "More than 2,000 public high schools in the United States are now teaching agriculture; 16 years ago there was not one." In 1912 agriculture was being taught in 335 high school in Ohio, 191 schools in Nebraska, 167 schools in Missouri, 132 schools in Kansas, 118 schools in Wisconsin, and 85 schools in Pennsylvania (Crosby, 1913). The teaching of agriculture in the high schools continued to grow prior to the passage of the Smith-Hughes Act. The passage of the Smith-Hughes Act in 1917 could be regarded as more of an "AMEN" to the teaching of agriculture than the start of it.

Prior to 1917 agriculture was being taught in every state of the Union as many of the states had passed laws providing for the teaching of agriculture in public schools (Ekstrom, 1969). However, it should be noted, that the agriculture being taught was more general than vocational and there was great variation in the quality of the agriculture programs from state to state. The Smith-Hughes Act established strict guidelines for the conduct of agricultural programs thus improving the quality, provided federal funds so more programs could be established, and made the programs more vocational. Although, the Smith-Hughes Act provided for uniformity and the expansion of agriculture, the foundations of agricultural education had already been laid by a group of hard-working people prior to the passage of the Smith-Hughes Act.

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THEME ARTICLE

What Can We Learn from Agricultural Education Before the Smith-Hughes Act?

by Michael J. Martin

School-based agricultural curricula are currently being pushed in multiple directions. Programs have been turning towards various guiding principles, including career training, agri-science, and post-secondary preparation as well as agricultural literacy. The pressure to teach agriculture from any of these directions (or worse, from no direction at all) comes from a variety of influences. The work of school-based agricultural education is guided at the federal and state levels by the Carl D. Perkins Career and Technical Education Act. The focus of this legislation is career training and post-secondary preparation. However, local programs are also guided by initiatives within their states, communities, and from agricultural industry. For instance, the CASE (Curriculum for Agricultural Science Education) initiative has become popular with some programs because of either local or state influences. Yet, CASE is not universally popular because not all states believe that agri-science is the best principle of school-based agricultural education. The cumulative effect of these pressures is a patchwork of agricultural curriculum and possible confusion for teachers as they try to effectively deliver agriculture programming.

While our current context (era of accountability and continued urbanization of America) is unique in the history of school-based agricultural education, the situation of teachers having a variety of differing guiding principles to choose from is not new. Agricultural teachers before 1917 were in much the same situation. Before 1917, school-based agricultural education curriculum was not guided by federal legislation. Agriculture teachers were free to choose their own principles to guide their program. This was also an era of tremendous growth for school-based agricultural education programs as thousands of local communities decided to include agriculture as a part of their school curriculum. The focus of the agriculture curriculum varied greatly from school to school.

So what were some of the guiding principles of school-based agricultural education before 1917? We do not have many records of what agriculture teachers taught in those days; however, if we turn to the agriculture textbooks available at the turn of the 20th century, we see a variety of principles that are still being taught today such as problem solving, vocational value of agriculture, and experiential principles in agricultural education. Other published principles are not normally found in textbooks today, such as the importance of having moral education, universal peace, aesthetics, and liberal education in agricultural education.

For example, many of the textbooks talk about how school-based agricultural education can be utilized to develop citizenship skills in youth. The school and agriculture program represented a crucial agent of change in the local community. The community could be built-up through developing the leadership skills of students, improving of quality of life in a community, connecting with community stakeholders, developing community infrastructure, and contributing to universal peace. Many of these ideas are linked to the time period of rural communities and agriculture before 1917, including the role of the progressive era, Country Life Movement, and outbreak of World War One (Martin & Knobloch, 2005). The context of the era can make these ideas seem out of place to agriculture teachers and students today. Yet, we can still find where educators of that era participated in discussions which we still have today. For example, some writers advocated for student-centered approaches to teaching while others discussed the value of teacher-centered approaches. In short, the principles which could guide school-based agricultural education were varied before 1917.

The passage of the Smith-Hughes Vocational Education Act of 1917 provided a framework at the federal level for curricula in school-based agricultural education. The guiding principle for agriculture at the federal level became vocational training in agriculture. There are a variety of reasons why agricultural education was included in the Smith-Hughes Act. The prospect of funding at the federal and state level influenced agricultural education advocates to support the inclusion of agricultural education in the legislation. The outbreak of the First World War also placed a significant emphasis on industrial and agricultural production to meet global demand during the war. Curriculum focused on vocational training in agriculture would remain the dominate focus until the 1980s.

This brings us back to today. Agriculture educators today find themselves in a similar situation as those educators teaching agriculture before 1917. The context is different. For example, moral and liberal-based outcomes are generally not included in school-based agriculture today. Yet, the influences of agri-science

and agricultural literacy movements are shaping school-based agricultural education today as much as career and post-secondary preparation. I do not possess a crystal ball which can accurately predict what will happen to agricultural education curriculum in the future. I do not foresee agriculture curriculum refocusing or undergoing a major change across all of the states like in 1917 in the near future. However, I think there is something to learn from the varying curriculum focuses before the Smith-Hughes Vocational Education Act of 1917 and today.

So, what can we learn from curriculum before the Smith-Hughes Vocational Education Act of 1917? The topic of agriculture is flexible enough to encompass a multitude of curriculum focuses. If you can envision a reason for teaching agriculture or your community has a need, then agricultural education teachers can adapt agricultural curriculum to meet these intentions. The curriculum initiatives from before 1917 show us this flexibility. We are lucky to work with a content area which can reach some people in so many ways. History teaches us that agricultural education is rooted in community and can respond to community needs.

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THEME ARTICLE

Nurturing our Established Roots: The Smith-Hughes Act as a Model for Agricultural Education Career Preparation

by Victoria Willis

The Smith-Hughes Act of 1917, also referred to as the National Vocational Education Act, promoted vocational education in agricultural and industrial trades and home economics in an effort to provide skilled employees during a time of labor shortage and rapid industrialization. While much of the vocational education promotion was targeted towards industrial education, Congress included agriculture within its definition of vocational subjects. Preparing youth for jobs resulting from the Industrial Revolution and offering teacher training in each of the offered fields was a key aspect to the Smith-Hughes Act. The Smith-Hughes Act was victorious in its effort to spread vocational education throughout the country; however, enrollment rates leveled off, and remained lower than what was hoped for. Critics of the program targeted the fact that job training provided in these programs tended to lag behind the actual needs of the industry (Steffes). A gap between classroom curriculum and industry needs is not only seen during the time of the Smith-Hughes Act, but in present day agricultural education as well.

I remember being a high school student, tasked with the enormous responsibility of choosing which path I would take next. The weight of making a decision lingered over me, as high school came to a close. I knew I wanted to be involved in agriculture, but I felt unsure of which path within the agriculture realm I exactly wanted to take. Ultimately, I felt ill prepared to make this life changing decision, and yearned for industry and career knowledge. Deciding one's career path should not be taken lightly nor left up to fate. Students should be informed with proper knowledge, opportunities, and necessary prerequisites in order to make this decision.

The passage of the Smith-Hughes Act not only provided funds for vocational agriculture courses but also was an integral cornerstone in the development of the National FFA Organization. The National FFA Organization prides itself on making a difference in students' lives through developing their potential for premier leadership, personal growth, and career success through agricultural education. Through the FFA mission, we are reminded to develop students in preparing them for a successful career within the industry. FFA provides career experience and connections through the Supervised Agricultural Experience section of the agricultural education program model. Through the Supervised Agricultural Experience, students are given the opportunity to explore and consider multiple careers, workplace behavior, and develop skills within an industry, while applying classroom knowledge.

In order for agricultural educators to instruct industry related curriculum and advise Supervised Agricultural Experiences, instructors need to obtain the proper knowledge and resources themselves before teaching others. As stated previously, during the time of the Smith-Hughes Act, trainings focusing on the offered fields were made available to vocational education teachers. If we are to prepare our students for entering the industry, we first must ensure our teachers are given the proper opportunities and resources to do so through professional development and in-service training seminars (Slusher, et.al, 2011).

Once teachers are informed and knowledgeable on technical skills needed for various career opportunities within agriculture, the classroom curriculum should reflect industry-relevant instruction that results in observable skill attainment. Providing students a curriculum in which they are able to acquire technical skills applicable to industry careers is a high school program necessity. Career clusters are one possible way to set a course of offerings in which students are given the opportunity to specialize in a specific career interest area. Career clusters serve as a channel for curriculum delivery, to include necessary skills for employment (Slusher, et.al, 2011).

Just as the Smith-Hughes Act aimed to fill industry jobs during a time of labor shortage, we as agriculturalists are facing our own challenges to fill jobs within our industry, in order to provide for and educate our population. Rapid retirement rates from the "baby boomers" generation are leaving an alarming number of jobs in need of skilled employees. In addition, jobs focused on science, technology, engineering and math (STEM) concepts are rapidly emerging.

Considering retirement rates, the need to supply the STEM pipeline, and the worlds' expected population growth to reach 9 billion by 2050, we as a society need agricultural education more now than we ever have. We, as an industry, are charged to provide for the world's growing population, and the only way to accomplish this task is to provide a steady flow of graduates that are prepared to be innovative, think critically, and solve problems within the industry and workforce.

Agricultural education programs need to continue to create a rigorous, positive and respected program image in order to attract more participation and interest, while aiming to increase student retention. Student enrollments in high school vocational education were increasing in the 1960s and 1970s, but in the 1980s enrollments began a downward spiral. Data indicates that after decades of decline, secondary career and technical education enrollment is currently on the upswing in image and enrollment (High School Vocational Education). While vocational education's image is on the upswing, it is still important to continue promoting the attributes, successes, and career preparation opportunities available within the agricultural education program. Industry and business professionals expect our graduates to possess literacy, numeracy, communication, technology, and general employability skills gained through participation in their high school program. "Business persons and community representatives are calling for input into standards development and assessment for high school programs and graduates, which should include standards targeted toward both academics and workplace" (High School Vocational Education).

While the Smith-Hughes Act was introduced many decades ago, much can still be learned and applied to present day agricultural education classrooms. By closing in on the gap between classroom curriculum and industry needs, students will be better prepared to enter the workforce. Students will apply classroom knowledge and life skills to a real world setting to contribute to society. Professional development and inservice opportunities to learn and collaborate with industry professionals should be made available to teachers to assist with the needs for college and career preparation in the 21st century. Agricultural education's history of student career preparedness will continue to give the program a positive image within the educational system and local community. The roots of agricultural education have long been nurtured and established because of the Smith-Hughes Act and what the agricultural education program was built upon still greatly contributes to our program's purpose and its impact on society by developing skilled students prepared to take on the challenges of the future for the betterment of our society.

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Back Cover: *Photos courtesy of Gary Moore from left to right top: Mule judging circa 1918 Missouri; packing wheel bearings. Middle: poultry judging and teaching veterans. Bottom: Young Farmer meeting California, Missouri and Young Farmers learning tractor maintenance*