Is Public School Agricultural Education Needed in the 21st Century?
It is No Longer Vocational Agriculture

By John Hillson

Putting a theme issue together for The Agricultural Education Magazine is a challenge. There are various perspectives and philosophical positions to be covered on any topic. I wanted this theme to focus on "Is Public School Agricultural Education Needed in the 21st Century?" to cover as many perspectives as possible. I wanted someone to say that we need to be a broader-based program and reach out to more students than we currently do. I wanted some to say that we need to change. It was easy to find things. I also wanted to have someone say that we must remain vocational. That writer was hard to find.

A few people were asked to write that Agricultural Education must remain vocational. They all turned me down, albeit politely. When Gary Moore asked for volunteers to submit manuscripts for this issue a few more brave people stepped forward and indicated a willingness to risk writing about the future of our profession. Again, no one volunteered to say we must remain vocational. Apparently the National FFA was right 10 years ago when it changed the wording on it's emblem to say agricultural education instead of vocational agriculture.

Since 1917, with passage of the Smith-Hughes Act, our field has been a vocational one. Prior to 1917 agricultural education was more academic and more broadly based. Today, as is obvious with the articles in this issue, we are returning to our original roots and becoming more academic and more broadly based. It is too late to submit an article for this issue, but it is never too late to submit a well-written article for the Magazine. I hope someone is willing to take a stand and defend why he or she believes agricultural education should remain vocational.

I have told you what is not in this issue of the Magazine, let me tell you what is in the issue. There is a historically-based article that discusses agricultural education prior to passage of the Smith-Hughes Act. It shows the influence of such events as the Land-Grant Act of 1862, Congressional district agricultural schools, and the basically academic program. Vaughn describes what we must do in order to have a successful future. Warnholt reminds us that for over 10 years agricultural education has been encouraged to support by word and by deed an academic dimension to the program. Bajama writes that our profession should look at preparing the total individual, not just skills developed in the classroom or laboratory. He challenges us to develop a vision for ourselves and in our students. Knoblock and Layfield point out that agricultural literacy in elementary schools will play a crucial role in the future of agricultural education. Layfield, Knoblock, and Davis give pragmatic suggestions on how to bring about a more effective literacy program at the elementary level. Richardson makes a similar point about the importance of literacy at the secondary level and the important role agricultural education will play in the future of getting food suppliers and consumers to work together and better understand each other.

Obviously, members of our profession are thinking about the future. The only real known about the future is the unknown. Certainly, it will be different. The collective expertise of authors says that is what we will have agricultural education, it will serve a broader audience than it presently does, and if all the right programs are offered and the correct decisions will be made, it will be successful.

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Do We Still Need Agricultural Education?

By Roscoe Vaughn

After 81 years of providing instruction and preparing individuals for successful careers in agriculture, can we say the job is done? Today, some individuals believe that little need exists for continued instruction in agriculture. They believe that teaching science and business skills will meet the food, fiber, and environmental challenges facing the world. In some respects, these individuals are correct. In the years ahead, agricultural education will become more focused on the science of producing and processing plants and animals as well as maintaining a healthy environment. The business skills needed by successful producers and agribusiness companies will continue to become more complex and challenging. If agricultural education does not change to meet the needs of a rapidly changing world, we can expect to see little demand for this subject in the schools of tomorrow. Many of us in the profession understand that the real value of agricultural education is not necessarily the subject matter content, but the method of teaching that makes this educational program and process meaningful and enjoyable for both students and teachers. Therefore, it is critical that agricultural educators continue to examine, refine, and improve our educational process as we prepare to enter the 21st century.

Reinventing Agricultural Education for the Year 2020

For the past three years, The National Council for Agricultural Education has conducted a major initiative to prepare agricultural education for the new millennium. The Council used Reinventing Agricultural Education for the Year 2020 (RAE 2020), a project funded by the W.K. Kellogg Foundation, to help agricultural education create its preferred future, rather than react and respond to change only after it happens. While we cannot anticipate all the changes that will occur during the next 21 years, we can certainly decide what we would like for our programs and students to accomplish. For example, we know that we want our young people to have successful careers after they complete our programs. If we want our students and teachers to be successful, we must do our very best to understand their current needs and anticipate their needs in the future. RAE 2020 has provided grassroots input into a preferred future for agricultural education. Not one participant in this industry task force said that we should abandon agricultural education—many have said that the program must change but none have advocated that it be discontinued.

High Quality Teachers Are Key to a Successful Future

There are several ways to ensuring a successful future for agricultural education. First, we must attract and keep high quality teachers. Bright young people entering agricultural education will ensure it sustains itself in future years. Teachers need the support of strong state and national leaders to help them keep abreast of changes in teaching methods, technology, and methodology in agriculture. Another key to future success will be agricultural education’s ability to deliver instruction to diverse audiences in diverse settings. Our programs must become global in scope and available to students of varying ages and backgrounds. Distance delivery of instruction will become commonplace. Agricultural literacy will become a more important focus for agricultural educators, and we will need to determine the primary customer for our literacy efforts. For example, we should consider targeting middle school and junior high students as the primary audience for our agricultural literacy efforts. By providing high quality instructional materials and programs for students grades 6 through 8, agricultural educators can focus their efforts on a specific target population. Some of these students will be taught by teachers trained to teach agriculture while other students will receive instruction from teachers with little formal training in agricultural education. To ensure successful integrated instruction occurs, high quality materials must be developed that can be used by teachers of all subject areas for presenting information about agriculture to their students. Students can take advantage of opportunities for leadership and personal growth under a system where schools pay a membership fee that allows all students in these grades to participate in leadership and personal development activities — perhaps a “Junior FFA” that doesn’t require individual membership fees. Students interested in pursuing careers could then enter career preparation programs and join FFA as they advance in school. Educational agriculture must be responsive to the needs of an increasingly diverse customer base. A cadre of high quality teachers with diverse backgrounds is essential for agricultural education to successfully meet the divergent challenges of the future.

Community Based Programs with Global Outreach

To ensure we meet the needs of the agricultural industry and a more diverse customer population, teachers must think globally but be empowered locally. To best meet the needs of students, our programs must become more “community-based.” Teachers can empower themselves locally by bringing a wide range of community stakeholders together to determine the type of agricultural education program the community needs and wants for their students. Together the community and teacher decide what should be taught. This ensures community and school support for the agricultural education program and allows the teacher to focus on how to teach using materials such as the Local Program Success Guide and The Agriculture Teacher’s Manual. Students interested in pursuing agricultural careers must have access to instruction and materials about the global agricultural industry that continues to evolve. Teachers must stay abreast of agriculture worldwide and show how world issues relate to the student’s home community, state, and country.

Managing Change Successfully

Finally, we must look for new ideas and new ways of delivering our agricultural materials and programs. The rapid advances in technology dictate that we must prepare students to deal with change. Change occurs at an accelerating pace and our students find it increasingly challenging to stay abreast of current information and technology. We must develop processes to help them deal with these challenges and help them feel comfortable working in a rapidly changing environment. Competition and cooperation will both be very important in the future and students will need to know when to focus their energies in collaboration with others and when to rely on their competitive edge to take advantage of their opportunities.

A New Vision for Agricultural Education

The national vision statement developed through RAE 2020 envision that all people will value and understand the vital role of agriculture and natural resources in advancing personal and global well-being. For this vision to become reality, we must reexamine and refocus our efforts related to career preparation and agricultural literacy. Opportunities abound in the years ahead and if we recruit bright young people into the profession and provide a support system to help them become successful educators then agricultural education will become more important than ever during the next millennium.

“Students interested in pursuing agricultural careers must have access to instruction and materials about the global agricultural industry.”

Roscoe Vaughn is Executive Director of the National Council for Agricultural Education in Alexandria, VA.
An "Academic" Dimension of Instruction In and About Agriculture

By J. Robert Warnock

During much of the 20th century some teachers and other professionals in agricultural education have viewed more adversely than friendly connecting the word "academic" to instruction in agriculture. It is not uncommon to attach negative connotations to courses that are referred to as academic. "Academic" has been viewed by some as synonymous with theoretical, not practical, ivory-towered, bookish, or remote - clearly characteristics that do not and should not be distinguishing features of instruction in agriculture.

There is another meaning of "academic" that seems to be catching on with professionals in public school education in agriculture. Academic instruction, when applied to agriculture, means scholarship, understanding basic principles and concepts as well as doing, applied science, reflective thinking, problem solving, and the symbiotic connection between general education courses and courses in the biological, physical, and social sciences and applied science courses such as agriculture and natural resources. Convincing arguments can be mustered to support the proposition that a distinguishing characteristic of instruction in agriculture during the 21st century should be its "academic" dimension, that is, its mutual dependence on and collaboration with the so-called academic courses and with its emphasis on scholarship and the application of basic principles and concepts taught in these courses.

National Research Council Recommendations

The Committee on Agricultural Education in Secondary Schools, appointed by the National Research Council of the National Academy of Sciences, studied and debated the connection between instruction in and about agriculture and the general education, biological science, physical science, and social science courses offered by secondary schools. The Committee's report, Understanding Agriculture - New Directions for Education issued in 1988, includes three major recommendations that pertain directly to the academic dimension of instruction in and about agriculture.

- Efforts should be expanded and accelerated to upgrade the scientific and technical content of vocational agriculture courses.
- Agricultural courses sufficiently upgraded in science content should be credited toward satisfying college entrance and high school graduation requirements for science courses in addition to the core curriculum.
- Much of the instruction about agriculture could be incorporated into existing courses (science, social science, etc.) rather than taught in separate courses in agriculture.

Connections With Academic Courses

Progress toward a more direct connection between instruction in agriculture and other courses requires conscious efforts by both teachers of agriculture and teachers of science, mathematics, communication, computer science, and other subjects not only to identify the symbiotic connections but to make the connections evident and useful to students. Perhaps an anecdote about a student I taught in high school will illustrate the point.

Make the Connection

Miss, a ninth-grade student, was known primarily by most faculty who taught him for his lack of motivational and intellectual prowess. Max and his lack of achievement in courses other than agriculture were discussed from time to time during lunch at the faculty members' table in the cafeteria. Max was a highly motivated student and above-average achiever in agriculture. The difference in his motivation and performance in agriculture and other courses was explained primarily by the fact he was the only son of a prominent farmer who had made it clear to Max that someday the farm would be his. Max had a clear career goal and had both the capacity and desire to attain the goal. During a conversation at the lunch table one day when Max's math teacher went into some detail about Max's lackadaisical attitude and effort, I offered the suggestion that the math teacher assist Max in seeing the connections between mathematics and farming. A few days later the math teacher indicated that she had tried my suggestion. When I asked how it worked, she replied, "I asked Max how he expected to keep records of his farming operation or prepare tax returns if he did not know mathematics." When I asked about Max's reply, she reported that his immediate reply was, "I'll do like my dad, my wife will keep the books!" Incidentally, Max's father attended adult classes; and, when the topic was record keeping, analysis, or taxes, his wife accompanied him to class.

Making the Connections

Both the math teacher and I boasted that effort to connect for Max instruction in mathematics with instruction in agriculture. Meaningful connections between academic courses and instruction in agriculture are not made by put-down questions by math teachers and little or no effort by teachers of agriculture to assist students in making the connections meaningful and useful. The major responsibility for making academic courses relevant to instruction in agriculture, and vice versa, rests with teachers of agriculture and teachers of academic courses. Accomplishing that responsibility requires collaboration between the teacher of agriculture and other teachers to ensure that both know and understand what connections are possible and relevant. The teacher of agriculture will have to be the aggressor in these negotiations and take the initiative with students in assisting them in seeing the relevance and importance in what they study in other courses to what they are learning about agriculture.

An academic dimension to instruction in and about agriculture also requires that teachers of agriculture emphasize and demonstrate in their teaching the knowledge from science, mathematics, communication, and other areas that is basic to understanding the basic principles applicable to agriculture and to solving problems in the agriculture. Teachers of agriculture, both through their words and deeds, can show and explain how basic knowledge taught in the so-called academic courses has relevance to learning and problem solving in agriculture. Students are the winners - the academic courses make more sense to students and instruction in and about agriculture becomes more academic. Instruction is academic in the sense that it shows scholarship, emphasizes the understanding and application of basic concepts and principles, and places high priority on reflective thinking and problem solving. These qualities should be sought as hallmarks of instruction in and about agriculture in the 21st century.
Agricultural Education: How We Got Started

By John Hillison

It is always difficult to determine the exact beginning date for a profession or field. That is certainly true for agricultural education. Some would argue that the beginning date for our profession occurred with the Smith-Hughes Act of 1917. Others would argue that the beginning date occurred at a time earlier than the Smith-Hughes Act, and even beginning with the agricultural societies that existed in the 1700s. While it is possible to look at an isolated situation in some form of education for an actual beginning, one piece of federal legislation—dating the Smith-Hughes Act was crucial for the development of a national program for agricultural education. In fact, this historically-based article will discuss agricultural education prior to and actually end with the Smith-Hughes Act.

Generic agricultural education received a big boost with the passage of the Land-Grant Act of 1862. Many things became possible after the Land-Grant Act and its support for colleges of agriculture across the country. This Act would permit the research and teacher preparation in agricultural education for the nation as a whole, as well as establish a home for cooperative extension.

In 1887 the research part of the Land-Grant university was well served when an act was passed by the federal government that greatly encouraged scientific investigation and the dissemination of its results. The Hatch Act’s preamble stated “be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that in order 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, there shall be established, under direction of the colleges or agricultural department of colleges in each State or Territory a department known and designated as an "experiment station." (Hatch Act, 1887, p. 1).

The Hatch Act encouraged not only research in agriculture, but also diffusion of the results of that research. Most would think of such diffusion as being education. The agricultural information shared at that time was both scientific and academic in nature.

Congressional District Schools

Just two years after passage of the Hatch Act the Alabama legislature passed an act establishing two branch agricultural experiment stations with attached secondary schools. These schools established in 1889 set the precedent for what was to become Congressional District agricultural schools. The concept of such schools was to have a comprehensive high school, similar to magnet or charter schools today, in each Congressional district of the state. The students were taught both academic and agricultural subjects. Many of the schools offered clubs centered around popular commodities in the area such as Pig Clubs and Corn Clubs. Because of transportation problems, most students were housed in dormitories and lived on the school’s campus. The agricultural skill developed were more scientific than vocational in nature and put into application in the attached experiment stations. A total of 11 Congressional District Agricultural Schools were established in Alabama, Georgia and Virginia established Congressional District Agricultural Schools similar to Alabama’s, for a total of approximately 30 such schools. Arkansas and Oklahoma used a similar concept, but did not call their regional schools Congressional District schools.

During the same Progressive Era that saw the development of Congressional district schools, an early version of Agriculture in the Classroom was being used by. By 1915 twenty-one states required agricultural instruction in elementary schools. Agricultural content was used as a medium to teach numerous academic subjects. For example, reading was taught by agricultural based literature such as a book entitled "Shooshing the Bay Mear," science was taught through the study of farm plant parts, and math was taught by using the selling of apples as an example. This early version of Agriculture in the Classroom also used a lot of hands-on experiences.

Gardening proved to be very popular in both urban and rural elementary schools. One end result of this trend was a movement called nature-study. Nature-study used such species as insects, birds, and soil to teach science. It had become so popular in the late 1800s and early 1900s that nature-study courses were considered to be converted to agricultural education teachers just prior to passage of the Smith-Hughes Act.

Development of Cooperative Extension and Agricultural Education

The Congressional district schools played an evolutionary role in the development of both cooperative extension and agricultural education.

Cooperative Extension

Land-Grant university personnel with extension responsibilities such as field agents were located at Congressional district schools. Some agricultural education teachers at the schools were required to perform extension activities such as teach short courses for farmers in the summer months. In 1912 Virginia had statutory requirements that the Congressional schools be used as centers for directing the demonstration teachers work and other extension work throughout the district. In many ways these schools mimicked the Land-Grant universities by emphasizing the three missions of extension, research, and teaching.

Agricultural Education

As Governor of Georgia, Hoke Smith, was very proud of the Congressional district schools in his state. He was quite knowledgeable of them by the time he became a United States Senator. In addition, a Congressional district school was built in Competition in the Congress by Dudley Hughes’ district. Certainly, the influence of Charles Prosor pervaded the Act, but the namesake of the Smith-Hughes Act also influenced it a great deal.

By the school year 1915-16, 3,675 secondary schools offered agricultural instruction to more than 73,000 students. This great number of students created a need for the preparation of agricultural education teachers. Many alternatives were considered for such preparation including converting nature-study teachers. There was also a movement to use normal schools for their preparation. In the end, the majority chose to use agricultural education departments located at Land-Grant universities for the preparation of teachers.

By 1912 the Page-Wilson bill was introduced in Congress. It was one of more than 30 bills introduced that proposed federal support for vocational education. One of the provisions of the Page-Wilson bill was to support for both cooperative extension and vocational education. When cooperative extension was split away and passed as the Smith-Lever Act in 1914 a commission was appointed to further examine the possibility of funding vocational education. In the end, the commission recommended such funding. That recommendation led directly to the passage of the Smith-Hughes Act.

Passage of Smith Hughes Act

With passage of the Smith-Hughes Act, agricultural education left Congressional district schools with their combined academic and vocational approach (leaning toward academic) and became vocational. In reality, every comprehensive high school in the country could now offer agricultural education and the Congressional schools were no longer that different. Many of the schools’ physical facilities were converted to use as comprehensive high schools. It is interesting to note that today we are moving toward the Congressional district school approach of combined academic and vocational training with agriscience. Those currently discussing magnet or charter schools as something new need to look closely at Congressional district schools. History always has many lessons to teach. One is that just as physical matter returns to its original form, programs frequently do the same thing. It appears the future of agricultural education can be found in its past.

References:


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Go To The Head Of The Class
Teaching Elementary Students in Fast Changing Times

By K. Dale Layfield, Neil A. Knobloch, and Carol Davis

Reflecting on yesteryear ... or even the present, one of the greatest challenges for agriculture teachers has been locating teaching ideas and materials. The challenge for those promoting agricultural awareness may be even tougher, considering the indirect relation they have to the subject. A study by Knobloch and Martin (1997) found that elementary teachers viewed agriculture in a very positive light and they believed that it is an important topic to integrate into the elementary curriculum. However, they also suggested that they need time, resources, in-service education, and support to successfully integrate agricultural topics and concepts into the elementary curriculum (Knobloch and Martin, 1997).

Secondary agricultural educators can play an active role in agricultural awareness for the 21st century. As a community leader and advocate for agriculture’s place in the 21st century, agricultural educators can actively serve as a resource for elementary-level educators, as well as those involved in non-traditional education - home, private, and charter schools. The goal of this article is to provide an initial reference of ideas and resources to assist those educating elementary-level children. Although some of the following ideas reflect concepts used in Iowa, state leadership among Farm Bureaus, Land Grant Universities, and Departments of Agriculture are similar.

Collaboration

A key issue to integrating agriculture is cooperation with supporting agencies. In many states, agricultural commodity organizations support the education of citizens, regarding agriculture and value-added commodities. One example of success is the Iowa Agricultural Awareness Coalition (IAAC). The “Coalition” is an organized group of aircraft commodity representatives, Iowa State University, state government representatives, and agricultural businesses whose mission statement is “Increasing youth awareness of the importance of Agriculture (Food, Fiber, and Environmental Systems) and the benefits throughout an individual’s life.” Many of the efforts of this group are transferable to other states and might be considered for sharing with leaders responsible for traditional and non-traditional elementary school agricultural education.

Some of the efforts of the coalition have been:

- The Iowa AgStation—Creative Ways to Infuse Agriculture into Your K-6 Curriculum—A resource guide on agriculture that was sent to every (1200) public and private schools in Iowa. There are five thematic approaches for use at each grade level (K-6), 18 pages of resources section, and a time-coded, 120-minute video of short segments for a variety of lessons:
  - Iowa Kids Love Iowa Foods—This program was used by teachers and food services in over 300 Iowa schools to help children appreciate food’s origin.
  - Student-teacher orientation—The coalition is targeting elementary-level student teachers and providing orientation to the resources available.

An exciting new program partnered with the coalition is Project Food, Land, and People (PFLP). PFLP’s mission is to “provide educational resources and promote approaches to learning that helps educators in grades PreK-12 to better understand the interrelationships among agriculture, the environment, and people of the world” (Project Food, Land, and People, 1998, p. v). The Food, Land, and People project is normally distributed through state coalitions. At the time of this article, eight states have an affiliate license to provide training on the curriculum. However, the material and information regarding this program are available at (415) 561-4445 (the National Food, Land, and People Headquarters).

The Teacher’s Academy is a major effort in several states that supports teacher in-service related to agricultural awareness. Often delivered during summer months at Land Grant Universities, these academies were “designed to teach K-12 educators in science, math, social studies, and other subjects how to teach using resources from agricultural, natural resources, and food industries” (Knobloch and Martin, 1997, p.29). Teachers may consider urging state leaders to initiate these institutes.

Web References

The World Wide Web has become a popular communication media for commodity organizations and coalition-type groups supporting agricultural awareness. Ideas for classroom activities and instructional resources that may help elementary teachers can be located at these sites:

- Iowa Kids Love Iowa Foods—http://www.reeusa.gov/serl/bep/ageclass.htm
- CYBERFARM—http://w3.aces.iastate.edu/InfoAge/CyberFarm/
- Ohio Agriculture in the Classroom—http://www.ohio-atic.org/

Sharing

A final recommendation for supporting elementary teachers in the agricultural awareness challenge for the 21st century is sharing innovative classroom activities already developed. Agricultural educators normally maintain a cadre of novel approaches used to motivate student interest in topical issues. In collaborative efforts with elementary teachers, spend an afternoon and share some of the activities on paper. Elementary teachers may be elated to take these ideas and scale to a level for primary-aged students. One example of an activity (that should be photocopied and shared with elementary teachers) was “The Food Label Activity” developed by Neil Knobloch.

Agricultural educators hold many of the keys to successfully assisting elementary teachers with agricultural awareness during the fast moving times of the 21st century. Yes, agricultural educators are some of the busiest teachers in the community. However, one afternoon a month for sharing resources and ideas with elementary teachers may be a good investment for agriculture in the 21st century.

References:


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Changes in recent years have created a fast-paced society of people using pre-packaged fast foods without knowing where the food came from. Many of today's changes threaten past linkages that foster an understanding of agriculture.

The potential void of agricultural awareness at the elementary school age is even more prevalent. Many of the societal changes that built Mega-Mart and Burger-Boy coupled with demographic shifts from farm-to-suburb have greatly reduced society's general knowledge of agriculture. The solution: Food. A tool as simple as the cheeseburger transcends all educational settings, allowing "teachable opportunities" of many agricultural concepts. The goal of this discussion is to initiate action for the integration of agricultural education in the elementary schools of the 21st century.

Where Have We Come From?
It was common in the beginning of our country that most families lived off the land and the parents would raise their own food to feed their children. Agriculture was localized and people used indigenous knowledge to raise enough food to survive. A lot of labor went into producing the crops and caring for the livestock. Productivity and efficiency were limited and the supply of food was also limited because there was not a developed distribution system or means to store food long-term. The industrialization of America with the use of machinery and technology, the advent of using fertilizers and pesticides, and the development of hybridized plant varieties dramatically changed the food and fiber system from the farm to the table. The United States Secretary of Agriculture has noted that the steady decline in the number of farms and the increase in acreage means agriculture is becoming more efficient and competitive in the global market. It is now agreed that agricultural education in the elementary grades can be based on six key points: (1) learning begins at a young age; (2) the importance of knowledge; (3) development of career decisions; (4) applied learning; (5) systematic instruction of agriculture from kindergarten to adults; and (6) connectedness to agriculture.

Learning Begins at a Young Age
According to Cheek (1985, p. 49), "educational psychologists tell us that attitudes, values, and interests of children are formed at an early age, and that while this is the developmental process, much of it is completed by the end of middle school." According to Coon and Cantrell (1985), children's attitudes and career objectives are often formed at a very young age. Thus, exposure to agriculture in elementary and secondary schools will make students better consumers of agricultural products and more supportive of the agricultural industry.

The Importance of Knowledge
Grover and Brunning (1980, p. 31) stated, "Prior knowledge about a topic is directly related to the amount of new information students are able to remember about that topic. Knowledge influences their ability to think, to solve problems, to explain all of their cognitive processes." Thus, knowledge about agriculture plays a major role in thinking and decision making regarding situations that are agriculturally related.

Development of Career Decisions
Because there is little vocational education in elementary schools, Toliver (Skochnik, 1995) encouraged counselors and teachers to do their part to help kids view jobs as opportunities. Teachers help students build a bridge to the world outside the classroom (Skochnik, 1995). Further, other professionals feel that there are plenty of activities that elementary teachers can do to help with agricultural education about food, nutrition, and agriculture (Iowa Farmer Today, 1997).

Applied and Experienced Learning
Dewey stated that experiential learning gets the learner more involved and enthused about the subject matter. "There is an intimate and necessary relation between the processes of actual experience and education." (Dewey, 1938, p. 20). Agricultural awareness activities are defined as learning opportunities that actively engage the learner about a concept that is related to agriculture. These hands-on activities have an essential place in the classrooms and curricula of our schools, especially the elementary classes.

Systematic Instruction of Agriculture
The study on agricultural education by the National Research Council (1988) found that systematic instruction about agriculture should be taught from kindergarten to twelfth grade. According to Julia Stutman (1998), it is common to get responses from children that they think their food comes from the grocery store and that brown cows produce chocolate milk. This is an example of the ignorance about agriculture. These children are ignorant, not necessarily by choice, but because they have not been taught or exposed to agricultural concepts.

Connectedness to Agriculture
Since everyone is connected to agriculture by the food they eat, the clothes they wear, the plants they grow, the environment they live in, and perhaps the career that they actively pursue, agriculture is a subject that cannot be overlooked by teachers and adults in our society. Agriculture exists in our society in many ways as illustrated by the seven occupational areas in agricultural education: Agricultural Production, Agricultural Sales and Services, Agricultural Mechanics, Agricultural Products and Processing, Horticulture, Forestry Conservation, and Natural Resources. Many times all or nearly all seven areas of agriculture can be found in the communities of our schools. Agriculture is a relevant and practical science that can be integrated into nearly every subject that is taught in our schools (Knobloe and Martin, 1997).
Do We Need Ag. Ed. in the 21st Century?
Students' Soundoff

Ohio

Yes, I do believe ag ed is needed. As the holders of the future we, as ag ed students, need to be prepared for the future and without the proper education we won’t be able to lead a fulfilling future in the ag world.
Coty Bodamer
Amundsen-Clearcreek High School, Lancaster, Ohio

Florida

Agriculture is the heart of all cultures yet many fail to recognize the full effect of the industry—It’s more than just sows and plows. The average person is aware the basic function of agriculture is contributing food. However, few recognize its added functions that make agriculture an integral part of a sound, mature, and sustainable future. When I first walked into a class called “Introduction to Agriculture” I had no clue what agriculture was. It was just another class on the middle school wheel. My teacher instilled upon me that agriculture was an enormous industry that we could not live without it. My teacher also emphasized the advancements that have taken place through research and experience. From that foundation I have gone on to gain a greater appreciation for the industry and I continue to educate others that chocolate milk does not come from a brown cow and eggs do not come from the grocery store.
Jessica Behrens
Plant City FFA

Missouri

Yes, I definitely believe that agricultural education is needed in the future. I am a senior in HS and am planning to attend the University of Missouri-Columbia to major in ag education. I see the future as a tremendous opportunity for those interested in agriculture. New ideas and technologies are being invented everyday. These technologies will give the 21st century farmer a strong advantage. However, these resources will require young, educated people in order to use them. The worldwide population is supposed to increase by 40%, leaving extra billions of mouths for agriculturists to feed. This is seen as a problem that can’t be solved without educated people. Now is the most important time to educate our youth on successful farming methods and the resources out there.
Justin Roberts
Marshall FFA Chapter

Kentucky

Yes, I think that agricultural education will be needed in the 21st century. I believe this for two reasons. The first, and I believe the most important, is that there will be so many mouths to feed. The world population is estimated to nearly double in the 21st century, therefore we need people educated in agriculture to be able to feed that many stomachs. The second reason is that agricultural education teaches a trend that is dying. That trend is, as the creed says, “being happy myself and playing square with those whose happiness depends upon me.” So many people these days are out to run you over to achieve wealth. This line of the FFA Creed reminds us that it is not what is only best for ourselves, rather what is best for everyone that we should strive to achieve. I believe that if more people would abide by this, the world would be a better all around place.
Wesley Jones
Columbia, Kentucky

Illinois

Agricultural education will definitely be needed in the next century. The Indians were teaching the pilgrims how to grow corn long before any formal agricultural education was used. Since that time we have learned about how to use horses, tractors, and now computers to educate and meet the food demands of the world.
Agricultural education will always be needed. With the constant changes in the field of agriculture, children and adults will need to be educated about these changes. Most students will also take what they learn in their agriculture class and eventually apply it to their career.
Lindsay Donovan
Clinton FFA Chapter

New York

Yes, I do believe that agricultural education is needed still as we are going into the twenty-first century. For many reasons—two being the FFA organization and feeding the growing population. As we move into the twenty-first century, the world population is growing larger and the amount of land suitable for farming is growing smaller. We still need agriculturalists to produce food for the population. This will mean that students will have to be educated in hydroponics, fish farming, and other animal and crop sciences. The other reason is that without an agricultural education program the FFA would cease to exist. The FFA gives students an opportunity to improve the vital skill of public speaking and gain confidence in themselves. To cut the ag. programs in many schools would be to deny the students many opportunities to be their best.
Cut agricultural education and we diminish the future by that much. Agricultural Education gives our young people a place to be their best. Don’t deny them that.
Lisa Poleswczak
Schoharie FFA

Michigan

Agriculture in the new millennium is a very scary subject for people who are employed in the ag. industry. But how can we prevent all of our worst nightmares from becoming reality?? Through Ag. education. There ARE young people out there who are dedicated to the positive outcome of our agricultural future. But how are we going to reach them? I am planning to attend college at Michigan State University to become an Ag. teacher myself. Not because I think it would be cool to be a teacher, but because I am afraid of what will happen when my own teacher retires. Where will my chapter go? What will they turn to when agriculture is tilled over like an old crop? I don’t want this to happen. That is why it is important to educate people more about the subject. If more people are aware of what could happen, more people will pitch in to try and help our future to prosper. So, to answer the question “Why do we need Agriculture?”, I want to say this, “Remember; no farmers, no food.”
Sarah Wise
Lapeer County Vo-Tech FFA Chapter, President

I think that the answer to this question is definitely a yes. I think that having ag education in the schools will be the key to keeping the American farmer alive. Kids today need to know the importance of the agricultural industry and America needs the assurance that this industry brings to our country. I think that getting rid of ag education in our school systems would be a terrible mistake because right now, I feel that we need it more than ever.
Erica Cole
Dadeville FFA

Indiana

Yes, ag ed is needed in the new century. As a person of agricultural background, current regional FFA officer, and college ag ed major, I have seen first-hand why ag ed is needed. Ag education is not only teaching someone how to farm or milk a cow, but how to have, and handle, large amounts of leadership and the responsibility that comes with it. Without this leadership and responsibility that many FFA members and ag students have gained through ag education, we would all probably be lost in the world.

Texas

People in the next century, and now for that matter, need to open up and see what ag ed is really doing for young people today. For one would be lost without it; that’s why I decided to make it my major and livelihood. Agricultural education bolsters the key to everyone’s future, however only a select few realize what they possess and the potential it has in store for them. Only through ag ed will the leaders of tomorrow come to the front of the pack. Agricultural education will survive the millennium, even if the rest of the world doesn’t.
Aaron McDonald
Madison Central FFA Chapter

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An Indictment

By Duane Bajema

Jonathan Kozer’s book The Night is Dark and I Am Far From Home, A Political Indictment of the U.S. Public Schools describes education’s inability to ask “remorseless, penetrating questions concerning the intended use or potential uses” of the basic skills taught to our children. Kozer continues that, “...we may very well manage to teach a few more million children how to read and write; but we will not have solved the overarching problem of a technological competence gone wild, a scientific expertise gone mad, and intellectual excellence that does not even dare to state or specify what master it will serve.”

Kozer’s indictment can be used constructively to help us critically think about our profession as we prepare for the twenty-first century. The profession has been successful at teaching young people how to develop skills and solve problems in agriculture. Learners have developed proficiencies such as balancing ratios, calibrating sprayers, public speaking, calculating yields, and farm records analysis.

Agricultural education has helped farmers produce more with less in the name of competitiveness and efficiency. Ag education has played a major role in the development of agriculture in our rural communities, and ag teachers have felt pride when former students have been on the cutting edge of progressive agricultural change that has occurred in our communities.

The achievements are laudable, but we as teachers must recognize our role in the problems that have affected our rural communities. Has the success of the ag teacher been partly responsible for the agricultural consolidation that has occurred? As Kozer stated, have we contributed to a process where we fail to enlighten learners “to a technological competence gone wild?” Have we contributed to the loss of agricultural businesses, the demise of the family farm, and have we given tacit approval to vertical integration in agriculture in the name of efficiency and the bottom line without critiquing the events of our day? The question has not been empirically answered, but the question does need to be asked and discussed as we prepare for the next century.

Can We Aspire?

We cannot retrieve the past, but we can aspire to the future. Do we go along for the ride as agriculture continues its technological development? On one hand, we have no choice and we will adapt during the journey. On the other hand, we have a moral obligation to teach more than skills and problem solving. A community without the ability to create a strong vision for the future will be in danger of being taken over by someone or some entity outside the community who does articulate a vision, and as some have argued, the visionaries of our time have deleterious effects on long-term social community development.

The late Dr. Alan Kahlber gave the 1995 Distinguished Lecture at the American Association of Agric. and Natural Resource annual meeting and he titled his presentation “Dawn is Breaking: Are We Prepared for the New Day?” The presentation followed true to the title by constructively critiquing ag education and teacher training programs. He challenged secondary teachers to “respond to the needs of the learner.” He posed the question, “Are we to assure that employer needs and needs of learners as they perceive them are the same?” He encouraged a renewed emphasis of addressing the needs of the learner instead of the employer by giving them the same attention that we give the agricultural subject matter. Let’s first be educators and then agriculturists.

If we are to truly be “educators” and be truly concerned about the “needs of the learners,” we should be helping learners evaluate and critique what is real, what is not and what should be for themselves and their communities. If we are truly concerned about the learner, we should educate the learner to critique what is happening communally and capacitatively we give them with a workable vision for their future well-being.

The Vision

The ag teacher is not responsible for the vision, but the ag teacher can encourage the development of a vision in the learners by engaging the learners as they seek answers to perceptive questions. What would be an ideal role for agriculture in the community? Ideal models have been given in our studies of hogs, dairy cows, flowers, fish, and corn plants. There is nothing stopping us from developing an ideal for agriculture in our communities. A discussion of the ideal will empower a learner to think about and evaluate what is occurring, examine alternatives, and consider strategies to attain the ideal.

The learners can be provided with various questions. Will the activity improve my community? Will the soil, groundwater, lakes, streams, and wildlife be maintained or improved? Will the activity improve the quality of life? Will the activity positively contribute to the institutions of the community such as schools, libraries, churches, and other community services? Will the activity promote good employment opportunities in the community for my children and grandchildren? Will the activity be good for my neighbor?

Positive and visionary responses to the questions will promote the well being of communities, states, and ultimately of nations and the world.

Civilizing Process

The activity should help the learner become a more authentic human being, more sensitive to the world around them, and more eager to contribute to the civilizing process. The process should challenge the learner to look beyond the measures of efficiency, and in so doing, be empowered to actively participate in the development of a vision that will include them in decision-making that will shape the future of their community and subsequently, all of society.

References:

Duane Bajema is a graduate student at Iowa State University, Ames, IA. (no photo)

Fast Changing Times...

(continued from page 12)

What Can We Do to Support Elementary Teachers in the 21st Century?

Three simple points can help elementary teachers prepare to meet the agricultural awareness needs of youth in the 21st century.

Collaborate: Develop a team of elementary-level educators by whom curricular calendars can be planned to integrate agriculturally-based activities throughout the year, using existing academic subjects and thematic units of instruction.

Avail: Offer departmental resources and agriculture educators students to support awareness activities using the greenhouse, school gardens or land lab, food science lab, or animal science facilities.

Share: Provide reference or materials and knowledge of agricultural workshops to elementary teachers. Some examples may include agricultural Web pages, agricultural textbooks, hands-on activities, video, and teaching ideas.

Summary

Agriculture is the foundation of our country and our diet. Teachers must assure stability of this resource through comprehensive education efforts at all levels. Fast changing times have created many opportunities for the agricultural education profession to provide leadership into the 21st century. What role will you take?

References:

“There is an intimate and necessary relation between the processes of actual experience and education”

John Dewey

The Agricultural Education Magazine January-February 1999
Ag Education As Urban Survival School

By R.H. (Dick) Richardson

When I studied "Vo Ag" in the 1950's, 35% of the people in the United States lived in a rural environment. I grew up in a small town in Central Texas, and worked on the farm 4 miles away where my mother was born. We had an acre garden like our neighbors, and folks shared what they grew. A local slaughthouse processed and stored our animals for us to eat. People knew one another or their families. We were neighbors, sometimes friends, and generally accommodating. The feed store, drug store, hardware store, and a cafe were the centers of my social life during the week, with football or baseball games being highlighted on Friday night. Saturday night would find both adults and youngsters downtown at the intersection with the traffic light, parked along the curb, watching games from friends, or getting a malt at the drug store soda fountain. The arrival of a drive-in theater and the Dairy Queen began to change that pattern. TV invaded after I was in college.

Now there are less than 2% of Americans living in these rural towns and countryside, too few for the census to count. The "power of the people" has shifted to "urbanites" who are strongest in vegetable gardens, sausage making, strawberry canning, milking the cow, or making bread. Food comes from supermarkets and no one knows where it was grown! We may speak to our next door neighbor, particularly if they have a dog we like, but are just as likely to call the cops when they have a noisy party. We depend on our daily bread from people we don't know and never see. We believe that a trans-national corporation will feed us, clothe us, entertain us, heal us, employ us, and bury us. Ninety eight percent of the population is living the "good life." Yet we would become very hungry if the food shipped from somewhere happened to be delayed. In fact, we would call the cops or our Congressmen if the trucks failed to arrive and the shelves in the supermarket became bare. "Somebody better do something!" Food is our Right!

Think again, folks. Complain to Archer Daniels Midland -- "Supermarket to the World!" -- and see if service improves!

Agricultural education has a massive challenge to reconnect people with one of the basic needs of life - food. Not that everyone will need to feed themselves, but they will need to respect farmers who hold our lives in their hands, and they will need to understand the reality of food insecurity. Roaming bands in Rwanda or Somalia (Africa) kill the farmers and take the food. Who will grow the next crops there? The UN or other "aid" groups may feed the killers, but... the farmers are gone.

Why did the floods in the Midwest create a giant "Dead Zone" in the Gulf of Mexico? Without ecologically sound agriculture, cities experience floods, and seafood in the Gulf of Mexico dies. Global distributors buy where food is cheapest - often not in the US - and sell it where they get the best price. We don't murder our farmers. We just bankrupt them, driving them into cities while their land is consumed by urban sprawl. Green yards and golf courses are valued much more than food for the table, but few Americans make these connections. Ag education is needed to teach fundamentals of life and perhaps even survival to the next generation.

Food has become a commodity, valued like TVs, where the "invisible hand of the market" supplies according to the profit until the supply is exhausted. Then technology offers a substitute. Unfortunately, food has no substitute. Try filling an empty stomach with corn futures. Ag education must make the connection for urbanites between necessity, sustainability, and profitability.

Begin with the basics. Teach from ecological, social, and economic foundations. Organic agriculture offers some options. Many urbanites recognize food quality and speak with their money. The market for organic food is growing over 30% per year. A recent article in Nature, one of the world's leading scientific journals, reports results of a 15-year study where organic production not only matched that achieved with Green Revolution technology, but had the added benefit of being ecologically regenerative.

"Today's public is over 98% urban; the students live in cities. Public schools need a revised ag ed curriculum that includes:
1. Lessons that explain how consumer choices affect farming practices, fair profits for farmers and food security.
2. Lessons that describe ecology and its practices.
3. Lessons that implement "urban farming." (Urban landscapes can be edible. Public policy can make the edibles lookscapes economically attractive, esthetically pleasing, and ecologically restorative.)

With our growing population, public schools not only will need ag education they will need more ag ed teachers!

R.H. (Dick) Richardson is with the Zoology Department at University of Texas, Austin, TX. (no photo)

Joe Scatterscrew
(continued from back cover)

"Sure, glad to have you. Now down in the food lot I am feeding out a bunch of steers. They will eat pretty close to choice. And you may want to look at my eat and vetn care. Got three head to the acre on that little field. Just opened a new trench silo, too. Just what do you want to see?"


A few of the boys gathered around but some of them were down in the machinery shed starting and stopping Mr. Holt's new tractor. Others were tending the big registered bulls in the small exercising pasture.

By the time Mr. Holt had finished explaining how he worked out his feeding mixture and how the big grinder and mixer operated, only two boys were listening. The others had wandered away. Joe asked a few questions, thanked Mr. Holt and yelled at the boys to follow him to the feed lot. Mr. Holt hesitated, switched the motor on and resumed his work.

"Just go ahead, Mr. Scatterscrew, make yourself at home. I've got to get this feed ground."

When Joe got most of the boys together at the feed lot, he noticed that Paul Simmons was dripping wet from head to toe.

"What happened to you?"

"Dick Jackson pushed me in the pond", Paul grinned. "I'Il have to go home when I get back to school and change clothes."

Before Joe Scatterscrew could give the Jackson boy the chewing out he deserved, Paul interrupted hastily.

"That's all right, Mr. Scatterscrew. I got it first."

"Started what?"

"Well, sorta pushing each other." Joe scowled and looked at the boy's feet.

"You boys are going to have to clean your shoes good. I don't see why you don't watch where you step around a feed lot..."

"We was sorta pushing each other..."

"Well, I'm going to have to take you boys in hand. Next time a thing like this happens, you are all going up to the principal."

Joe spent a fast five minutes explaining the feeding operation. Willie kept pointing at his watch behind Mr. Scatterscrew's back and the boys nudged each other before they opened up an avalanche of questions.

The bus was twenty minutes late for the English class but Joe was pretty pleased at the interest the boys had shown the last ten minutes. They had all asked questions. He watched them move slowly toward the main building.

"Good bunch of boys. Just takes a little time to get them interested." Course that grabbed English teacher would mean about them being late, the principal will gripe about Paul Simmons having to go home and get dry clothing and the bus driver will talk about the condition of the floor of the bus.

Joe shook his head. It seemed sometimes like he couldn't get any cooperation in putting on his program. He walked back into the Agricultural Building, V.A. III class coming up. Now where did I put that teaching plan? He looked for it with an exasperated expression.

He gave up after a few minutes search, knowing that it would turn up sooner or later. He wasn't going to be caught short with the V.A. III class though. He checked over the bulletin and found enough on selecting a corn variety to go around. The corn in the community was just coming up. That ought to keep them interested. If they raised too much fuss about studying this morning, he'd go, they would make him give the shop a good cleaning up... or maybe take them on a field trip.

He sat down and waited for the bell to ring.

E.V. Walton taught at Texas A&M University in the 1950s when he wrote these stories.
Me and My SAE

By George A. Rowers

George A. Rowers is an agricultural education teacher at Central High School in Woodstock, VA.

It has been known in ag ed circles that the Supervised Agricultural Experience (SAE) is the best way to accomplish many of our goals including career education, skill development, and knowledge acquisition and application. Traditional SAE works for most students and most occupations, especially those in ag production, ag business, and horticulture. The field of natural resources, however, is a bit more challenging for such experiences. Many of these occupations are in the state or federal government and allow for little, if any, student employment. Many other natural resource fields are dominated by professionals with little opportunity for traditional SAE placement. For these reasons, I started exploring ways to get students in my natural resources courses some career information and exposure.

I contacted the VA Forest Service, the VA Department of Forestry, and several other state and private entities that deal in natural resource career fields to ask if they would be willing to allow one of my students to go with them for a day and do what ever they do. Must everyone that I contacted was more than willing to cooperate although some had to secure permission from their agencies first.

After contacting potential shadowing partners early in the year, I develop a list of shadowing sites. Students are then given a questionnaire that asks them to indicate their career objective and their plans for post secondary instruction. I also ask them to rank the areas of natural resources according to their preferences such as game, fish, forestry, soils, or water. Finally, I ask them to list their top three choices from the list of shadowing partners. From these questionnaires, students are matched with professionals and given assignments.

When students receive their shadowing assignments, they must make the contact and arrange a mutually-agreeable date. They are required to work the hours worked by the professional and meet them at the job location. Also, at the time of first contact, they determine clothing and A hunts requirements as well A hunts arrangements.

Administratively, I must get the activity approved as a field trip and then be sure students have permission slips turned in before participating. These slips indicate that it is a school activity, that school rules are in effect, and that neither the school, nor the cooperating agency or individual are responsible for accidents. I also must notify our school attendance coordinator of the student’s activity.

On the day of the shadowing, the students take with them a list of questions which they must ask and find the answers to. I provide this list to the cooperating professionals when I ask for their participation so that they are not blind sided or surprised by any items.

I teach an Introduction to Natural Resources course that is made up primarily of sophomores and two upper level Natural Resource courses dominated by juniors and seniors. This shadowing experience is reserved for the junior and senior students who are more mature and dependable and have their own transportation.

I have contracted and secured the cooperation of the following private professionals in our area: three taxidermists, one soil scientist, three environmental testing businesses, a trout farm operator, and a forest manager for Westvaco. In addition, the following governmental agencies are cooperating: VA Department of Forestry (all job descriptions), VA Department of Game and Inland Fisheries (Game Wardens, Technicians, Hatchery Managers, and Biologists), US Forest Service (Supervisors, Nature Interpretants, Technicians, Foresters, etc.), Soil and Water Conservation District Soil Scientists, Town Water and Wastewater treatment plant operators, and County Landfill personnel.

Not all shadowing sites are utilized each year and I try not to send more than one student with each cooperating per year. Normally, students are one on one with a professional, although some professionals have requested two students at a time.

When students return from their shadowing, they are required to write a complete report on what they did and what they learned. Students present this orally to the class and are then questioned on their experience. The entire class benefits from each shadow and can hear about as many jobs as there are students in the class. It is also the responsibility of the student to write and mail a thank you note to their cooperating professional.

I try to keep in contact with professionals and make sure all is well and it is not uncommon for the cooperating persons to be awarded with distinguished service, appreciation, or honorary FFA membership at our banquet. In fact, many are already honorary members.

This shadowing experience is one of the most valuable teaching exercises that my students have and I often wish as students give their reports that I had the same opportunity when I was in high school. Students that were excited about a certain career field sometimes return talking about how tedious, boring, or repetitive that job is. Others come back reporting on how the 50 year old forester wore them out climbing ridges and marking timber. Still others come back with glowing reports of how they found something fascinating and exciting that they want to make their career. If students can learn these lessons now before wasting four or more years of college or ending up in a job they do not like, it is definitely worth a day out of school.

Certainly, the shadowing concept is not new nor is it specific to Natural Resources. It can be utilized in many agricultural professions where traditional SAEs are not possible. It is an excellent alternative for many students and many career fields that we in agricultural education should be utilizing more fully.

Questions to be asked by the student:

- Why did you enter this field?
- How many years have you worked in this?
- What do you like about your job?
- What do you dislike about your job?
- How were you trained for your job?
- What is the entry level salary or wage for this type of work?
- What benefits do you have?
- What are normal working hours?
- How many hours a week do you spend on the job?
- Are there many job opportunities available in your field?
- Will students likely have to move to get a job in this field?
- What types of things do you have to know? (Tree ID, Soil Characteristics, Animal behavior or anatomy, etc.)
- What types of things do you have to be able to do? (Use a computer, perform calculations, write letters, draw maps, operate heavy machinery, supervise workers, etc.)
- If you had it to do over again, would you go into the same field? Why or why not?
- What are some good places to get training for this job?
- What types of people skills do you need?
- What types of continuing education do you participate in? Who pays for this?
- If there is a professional association for this job? If so, what is it?
- What are benefits of a member?
- Is there any type of trade publication that you receive?
- Are you supplied with a vehicle or do you provide your own?
- Were you an FFA member in high school?
- What type of school district or other types of experiences (other than higher education) helped to prepare you for this career?
- Looking back, what experiences would you like to go back and take advantage of?
LEADERSHIP

An “Ag” Teacher’s Teacher Educator: Mr. T. J. Honeycutt—A Master’s Plus 30 Man

By Craig Edwards and Herbert Schumann

During Mr. T. J. Honeycutt’s tenure as associate professor of vocational education and eventually head teacher educator at Sam Houston State University (SHSU) in Huntsville, Texas, he was responsible for the training and certification of 835 vocational agriculture/animal science teachers (Schumann, 1998). In many respects, Mr. Honeycutt’s retirement in 1984 symbolized the end of an era in our profession, that is, a teacher educator with a Master’s degree plus 30 hours and above of additional coursework, but no earned doctorate degree. His “doctorate” was the outcome of “toiling in the vineyard”—conducting a first-rate vocational education program for many years, a caliper of program recognized for its quality by his peers within his state and beyond its borders.

The Early Years

Mr. Honeycutt graduated from Marlin High School in Texas in 1935. (Years later, Marlin is where he would begin and end his 15-year career as a vocational agriculture teacher.) During World War II, the years of the “Great Depression,” in the years 1935-37, he attended what was then called John Tarleton Agriculture College in Stephenville, Texas, now Tarleton State University.

Following graduation and receipt of his associate degree in agriculture, Mr. Honeycutt taught various elementary grades at two different rural schools for four years in the Falls County area (near Waco, Texas). In 1939, he married Miss Hazil Oliver, who remains his wife to this day; their union produced a daughter, Lani. In the early 1940s, when he volunteered for the United States Army Air Corps, military service and World War II became the focus of his life. Mr. Honeycutt “went overseas” in 1943 and served his country in North Africa, Corsica, and Italy. He returned home and was discharged from military service in September, 1945.

In 1947, Mr. Honeycutt entered Sam Houston State Teachers College (SHSTC). What is now Sam Houston State University was founded in 1879 and was the first Normal Institute (Teachers College) in the Southwest. Later, Sam Houston became the first non-land grant institution in the United States to train vocational agriculture teachers (Sam Agriculture; Agricultural Education, 1996). Mr. Honeycutt entered SHSTC with the intent of earning a bachelor’s degree in agriculture and gaining teacher certification, which he did. In addition, before departing Sam Houston in 1949, he also earned a Master of Arts Degree in Agriculture.

He would later complete additional coursework work at both the University of Missouri and Texas A&M University.

Professional Life

Mr. Honeycutt began his professional career as a vocational agriculture teacher at Marlin High School on July 1, 1949. During his 15 years at Marlin, his students, chapter, and program received numerous district, area, and state awards and recognition. His most memorable accolades were the training and coaching of three state champion chapter conducting (parliamentary law) teams.

After rising through the leadership ranks in the Vocational Agriculture Teachers Association of Texas (VATAT), he served as the association’s president from 1957-58. He then served the National Vocational Agriculture Teachers Association (NVATA, now NAAE) as its Region II vice-president in 1961-62 and 1962-63. His leadership in local community service organizations included terms as president of the Marlin Jr. Chamber of Commerce and the Marlin Lions Club.

Mr. Honeycutt left Marlin High School to assume the duties of teacher educator at what was then Sam Houston State Teachers College in January 1964. He became head teacher educator in 1972 and held that position until his retirement in 1984.

Mr. Honeycutt’s duties focused on advising and teaching undergraduate agricultural education majors, graduate students, and supervising the student-teaching program. During this 20-year period he served as advisor to the SHSU Collegiate FFA Chapter. An annual function of the chapter is to host the Texas State FFA Leadership Conferences (now, Leadership Development Events). Since its inception in 1931, this function has brought thousands of Texas FFA members to the SHSU campus. Mr. Honeycutt served as chairman for this activity from 1964-83, and authored the Texas State FFA Quiz during his time of service. Also, while at Sam Houston, Mr. Honeycutt was active in campus affairs serving on the Faculty Senate and the Athletic Council.

The Consummate Pragmatist

If Mr. Honeycutt was anything, he was practical. When tutoring student teachers, he imparted much of his pragmatic wisdom implicitly, almost completely through personable. Concerning important points and dictums, he would frequently describe some supposed hypothetical blunder (formally a false pax of biblical proportion) committed by some anonymous teacher in some nondescript community. And just about the time you were hailed into “yea-ya land” (especially being the expert you were as a yet-to-be-tested student teacher) he would seemingly turn on his heels and inexplicably bear down directly on you. Then, using his forefinger like a rifle sight (assuming his trademark silver Cross pen wasn’t handy), he would seek out your target and say, “Now, South, you wouldn’t do that would you?” or “Liza, can you believe that teacher did that?” or even worse yet, “Craig, what would you have done in a similar situation?” If the underlying lesson or meaning wasn’t immediately revealed (sad, unfortunately, for one of the co-authors it sometimes wasn’t) upon later reflection it seemingly jumped out of the recesses of your psyche and you experienced that “oh ha!” moment. Yes, Mr. T. J. Honeycutt could “get into your head”; and, for the fortunate, at least a portion of the “professional DNA” he sowed would take root.

He was keenly enthusiastic about SAE record keeping and record management skills. He knew that these were skills that all students needed to acquire (not to mention many of the future teachers themselves) and that this knowledge was transferable to any future career path. Second, and again always the pragmatic, he taught the procedures for completing all required state “paperwork,” and he paid special attention to travel reimbursement forms.

In retrospect, it seems that nearly all his directed-wisdom, both explicit and implicit, coalesced on the principle of teaching you—how to get a job, and once you had one, how to keep it. But there was another message, one that he carved, chiseled, and polished almost daily just as a master sculptor would sculpt his most precious creation. This message was, simply, wherever you go and whichever hamlet, village, community, or city in which you choose to teach, “You are Sam Houston State University.” In essence, this is the program, this department and this school. He was acutely aware of the “level of visibility” an agriculture program can and frequently does wield in a community. Mr. Honeycutt knew the power of a “good” example and he knew that school administrators, parents, community patrons, and most important—students—would make the “connection.” That is, a “first-rate” ag teacher and a “quali- ty” program would speak volumes for the department and institution from which the teacher graduated. In sum, he viewed his graduates as walking, talking, and breathing advertisements for both the discipline and the university he had made his life’s work.

Still a Life Well Lived

Today, Mr. Honeycutt is 81 years young. He still maintains an avid interest in Sam Houston State University’s especially Department of Agricultural Sciences and in his discipline of agricultural education. On Monday mornings, he can be seen taking coffee at the University Newman Center at a corner with several of his former colleagues. He’s still a member of the Agricultural Workers Mutual Auto Insurance Company Board of Directors. The organization has held for fifteen years, and he currently holds a seat on the company’s Executive Committee. During most weeks he travels to his beloved Falls County and carries on a small cattle operation he has maintained nearly all his adult life. In addition, he remains a stalwart member of the First Baptist Church in Huntsville, Texas.

As with most educators whose careers spanned some 40 years, Mr. Honeycutt touched many lives. Thousands of students have been and continue to be touched by extension through the teaching of the hundreds (continued on page 27)

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The Agricultural Education Magazine

January-February 1999

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webmaster@agedmag.edu

By Matt Raven

The thirst for agricultural information as we enter the 21st century is evident by the many agricultural Web sites that are educational in nature. Agriculturalists in general understand the importance of educating the populace about agriculture. Consequently, even commercial agricultural Web sites often have an educational component. This month concentrates on eight Web sites that demonstrate the need for agricultural education in the next century. Additionally, as a continuing feature of the column, a FFA Web site (state or chapter) was spotlighted. Also, one utility site was reviewed. Each Web site review provides the location, a description, and a rating of 1 to 5 stars (with 5 being the best). Be sure to email me (raven@rainsstate.edu) the URL of a Web site that you feel should be included in a future installment. Please place Ag Ed Web Site in the subject header.

sites on the web

AgNIC (http://www.agnic.org/)

The Agriculture Network Information Center (AgNIC) is a network that provides access to agriculture-related information, subject area experts, and other resources. AgNIC is a voluntary alliance of land-grant university libraries and other agricultural libraries.

Extension services and other organizations focused on providing access to agricultural information. Their Web site is an excellent starting point for any one seeking agricultural information. A must for your bookmark list. ★★★★★

Agdomain (http://www.agdomain.com/)

Agdomain.com calls itself the master site for agriculture and they are trying to live up to that statement. An extremely well designed site is user friendly, fast, and provides access to a lot of agricultural information. A great feature is the easy to use search engine. Another Web site to add to your bookmark list. ★★★★★

Western Video Market (http://www.wm cattle.com/)

The Web site for the Western Video Market is an excellent example of how technology is changing the way agricultural business is conducted. The Western Video Market is a satellite auction service that has been in business for 16 years. Their Web site provides all the necessary information regarding their service. Additionally, they furnish other resources such as beef links and market reports. Thanks to John Dimick, an agricultural educator in Oregon, who recommended this site. ★★★★★

Dale Bumpers College of Agriculture (http://agtrail.unr.edu/depts/albcafe/)

The Dale Bumpers College of Agriculture at University of Arkansas has a well-designed Web site which acts as an excellent gateway for agricultural information originating from the University of Arkansas. The site is easy to navigate and provides access to information ranging from scholarship applications to experiment station publications. ★★★★★

National Association of Agricultural Educators (http://www.naae.org/)

The official Web site for the National Association of Agricultural Educators (NAAE) should be on any agricultural educators' bookmark list. One of the main attractions of this site is the teaching opportunities section. Additionally, the legislative section, a relatively new addition, is another helpful feature. The utility of this site will continue to grow with the site (e.g. when the member services section comes on-line). ★★★★★ 1/2

Sheep USA (http://www.sheepusa.org/)

The official Web site for the American Sheep Industry Association is an easy to navigate site with a wealth of sheep related information. Major sections include lamb, sheep, wool, and market reports. The recipes listed in the lamb section are one good reason to put this site on your bookmark list. The educational section as well as the photo gallery are both nice features. ★★★★★ 1/2

Journal of Agricultural Education and Extension (http://www.hlh.wau.edu/jae/)

The Wageningen Agricultural University in the Netherlands houses the electronic version of the Journal of Agricultural Education and Extension. This straightforward Web site provides full-text versions of all of the volumes of the Journal of Agricultural Education and Extension. This journal focuses on the changes in agricultural knowledge and action systems on an international basis. ★★★★★

Illinois Agricultural Safety and Health (http://www.ags.iu.edu/agasafety/)

University of Illinois Agricultural Safety and Health Web site is a good source of information that focuses on safety issues as they relate to agriculture. The site has a number of full-text agricultural safety fact sheets as well as links to other agricultural safety sites. This site would be a good source of information for preparing an agricultural safety unit. Navigation could be improved by providing fewer choices on the main image map. ★★★★★ 1/2

Texas FFA State Association (http://www.txaged.org/ffa-main.html)

This issue's featured FFA Web site is that of the Texas FFA State Association. This state FFA Web site does a good job of informing the public about FFA in the state of Texas. The page is well organized and easy to navigate. The page could be improved by providing more information and resources on-line for local chapters. Additionally, the page would benefit from more frequent updates (e.g. results from the 1998 National Convention). ★★★★★

Buy.com (http://www.buy.com)

Buy.com is THE place on the Web to buy the cheapest electronics. Buy.com searches out the lowest price for a given product on the Web and then sets their price below it. Buy.com specializes in computers, books, videos, software, games, and music. Be sure to check out Buy.com first before you buy a computer or software package. ★★★★★

Matt Raven is a Director of User Services in the Department of Agricultural Information Science and Education at Mississippi State University.
Agricultural Education in the 1800s

This issue of The Agricultural Education Magazine looks at whether or not we need agricultural education in the next century. Most people think agricultural education is primarily a product of the 20th century. However, much of the foundation for 20th century agricultural education was laid in the 19th century. If you can identify the individuals and events from the 1800s that lead up to 20th century agricultural education, you go to the head of the class.

1. Agricultural societies promoted improved agricultural practices. The first agricultural society in America was established in 1785, however it wasn't until the 1800s that agricultural societies really begin to flourish. The first American agricultural society was the:
   A. Philadelphia Society for Promoting Agriculture
   B. Kennebec (ME) Agricultural Society
   C. New Jersey Society for Promoting Agriculture
   D. Pendleton (SC) Farmers Society

2. In the early 1800s county fairs with livestock shows were started in New York as means of educating farmers. The father of the county fair was:
   A. Horace Mann
   B. Justin Morrill
   C. Seaman Knapp
   D. Elkanah Watson

3. Agricultural periodicals (newspapers) were a leading source of agricultural education in the early 1800s. These papers also promoted the teaching of agriculture. Match the following periodicals with the state in which they were published:
   3.1. American Farmer (1819) A. Maryland
   3.2. Newton Farmer’s Journal B. Washington, (1879) DC
   3.3. Agricultural Museum (1810) C. New York
   3.4. Plough Boy (1819) D. New Jersey

4. In the first half of the 19th century agriculture was a prominent topic in local adult education community meetings. These adult education associations numbered into the thousands and there was even a national organization. The name of these adult associations was:
   A. Seminaries
   B. Academies
   C. Lyceums
   D. Chautauquas

5. Massachusetts was the first state with a Secretary of Education. The individual who served in this position traveled to Europe and brought back revolutionary ideas on teaching in the early 1800s. These ideas included having children doing hands on activities, treating children as children and not as miniature adults, and having them garden and farm. The first state Secretary of Education was:
   A. Horace Mann
   B. Rufus Stimson
   C. Jonathan Turner
   D. Seaman Knapp

6. The individual in Europe whom greatly influenced the thinking of the Massachusetts Secretary of Education was:
   A. Martin Luther
   B. Johann Pestalozzi
   C. Amos Comenius
   D. Rousseau

7. Agriculture was rarely taught in colleges in the 19th century. This changed with the establishment of land grant colleges in 1862. Who is officially known as the father of land grant colleges?
   A. Seaman Knapp
   B. Justin Morrill
   C. Elkanah Watson
   D. Horace Mann

8. The real father of the land grant colleges was a university professor in Illinois who promoted the idea in the 1850s and even had an Illinois legislator ready to introduce federal legislation (but the Illinois legislator was not re-elected). This person was:
   A. Horace Mann
   B. Rufus Stimson
   C. Jonathan Turner
   D. Seaman Knapp

9. Starting in 1895 the office of Experiment Stations in the USDA started an active campaign to promote the teaching of agriculture in public schools. The authority to do this was derived from a piece of federal legislation passed in 1887 that established agricultural experiment stations and called for the “diffusion of agricultural information.” This act was the:
   A. Morrill Act
   B. Hatch Act
   C. 2nd Morrill Act
   D. Smith-Lever Act

10. In the last decade of the 19th century many state departments of agriculture and colleges of agriculture operated what could be described as “circuit riding teachers of agriculture.” These lecturers would travel from community to community and conduct 1-2 day long educational meetings on agricultural topics. The name for this activity was:
    A. Farmer Round-ups
    B. Farm Bureaus
    C. Farmers Institutes
    D. Winter Short Courses

(Question answers on page 9)

An "Ag." Teacher’s Teacher Educator
(continued from page 23)

of agriculture teachers who were privileged to receive his wisdom. The following is indicative of enduring testimony to Mr. Honeycutt’s legacy. In 1995, while one of the co-authors visited with another former Marlin agriculture teacher, this individual was reminiscing about his recent departure (from Marlin) and the many compliments students, parents, and community leaders paid to him regarding his years of service. He concluded the highest praise was from a longtime community patriarch, who had unabashedly remarked, “you know, you’ve been the best ag teacher we’ve had around here since T. J. Honeycutt left” (M. Vater, personal communication, October, 1995). Enough said—over 30 years removed, but far from forgotten—high praise indeed!

The Measure of a Life is Its Service
(Motto—Sam Houston State University)

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January February 1999
A SCATTERSCREW FIELD TRIP

by E.V. Walton

Joe Scatterscrew looked at his watch. Could it be that late! Only ten minutes before time for all twenty of the V.A. II boys to come stomping in. He began to look for his teaching plan.

Not in the desk drawer. Doggone it, those worm capsules melted all over that report the supervisor had been howling about for a month! Just one blamed thing after another. Well, be a philosopher—didn’t have much done on it anyway. Now where is that teaching plan?

He frowned. Could be in the filing cabinet. He moved some bottles of insecticides and three ears of corn. Nope. Not there. He scowled and muttered to himself, “I distinctly remember seeing the thing a month or so ago.”

He looked in the bookshelves and behind the filing cabinet before he remembered where it was. In the lower left-hand desk drawer with the vaccinating syringes.

Before the boys came in, he took a hasty look at it. Supposed to be teaching control of internal parasites. Well. Yeah. That’s it.

He looked at the plan and the boys found their places at the tables and then stood up and gave them a firm look, tapping on the desk until they quietened down. While he was making out the absence slips, the noise rose again.

“What are we gonna do today, Mr. Scatterscrew?” Willie Skrabaneck shouted.

Joe hammered on the desk and shouted above the noise. “Now shut up! All of you. We are going to study internal parasites. Adolph, you go back there and get those bulletins on parasites.”

He scowled at them again and they quietened down some, but not much.

“Ain’t but two, Mr. Scatterscrew,” Adolph called. “Well, I know there must be more than that. Look some more.” “Ah, Mr. Scatterscrew, you ain’t going to make us read another bulletin, are you?”

Several of the boys groaned in unison.

Willie winked at Paul Steele.

“Mr. Scatterscrew, let’s go on a field trip!”

Joe Scatterscrew blinked at the boys and picked up a heavy yardstick.

“We are going to study internal parasites, I told you. Adolph, bring those bulletins here!”

“There are only four of them.”

“Four! I know there must be more than that.” “No sir. Four’s all.”

Joe frowned and walked back to the bulletin rack. Paul Steele hastily motioned to the boys.

“Mr. Scatterscrew, let’s go on a field trip or go to the shop. We could go out to Mr. Red Holt’s and look at his feeding operations. He sure has a good setup out there. Feeders, minerals, everything.”

Joe Scatterscrew ignored him and ransacked hastily through the bulletins. Adolph was right. There were only four bulletins on internal parasites.

He walked back to the front of the room and rapped again for order.

“You boys are going to have to take better care of these bulletins. I told you a dozen times to put them back, where they belong. The next time I catch you throwing them just any old where, I am going to give you a test.”

The boys quietened down and looked at each other. “Any of you boys know what an internal parasite is?” “Something like a mistletoe growing on a tree, isn’t it, Mr. Scatterscrew?”

“Don’t get smart with me. Do any of you know?”

“That’s what our science teacher said.”

Joe turned to write on the board but there was no chalk. He traced the word “internal” on the board.

“Oh!” Willie cried, “It’s like when a cow swallows a mistletoe, then.”

Joe Scatterscrew made a disgusted noise in his throat. “All right! All right! Pipe down. Now we are going on this field trip this time, but the next time you boys come in here acting like this, we won’t have another field trip all year. Hold on! Hold it! Now we are going out to Mr. Red Holt’s to look at his layout. Remember what you see. Six weeks tests are about due and I am liable to throw you a few questions on this trip.”

Joe drove the four miles at a fast rate and turned the big bus into the Holt driveway. He could see Red Holt running a feed mixer out in the big barn. Mr. Holt was one of the best farmers in the community.

The boys strung out in a long line enroute to the barn and before Joe could get the gate opened, several of the boys climbed over the tight woven wire fence. Willie Skrabaneck hit Adolph Kramer in the back with a cob and Mike O’Reilly made a yapping dog noise and ran at the Holt’s pet cat.

“Look at that booger climb that tree!” the boys shouted. Mr. Holt shut off the feed mixer and shook hands with Joe. “Thought I would bring the boys on a little field trip so they could see things done right,” Joe explained.

Mr. Holt glanced at the three boys who were climbing the ladder to the hay loft.

(Scatterscrew continued on page 19)