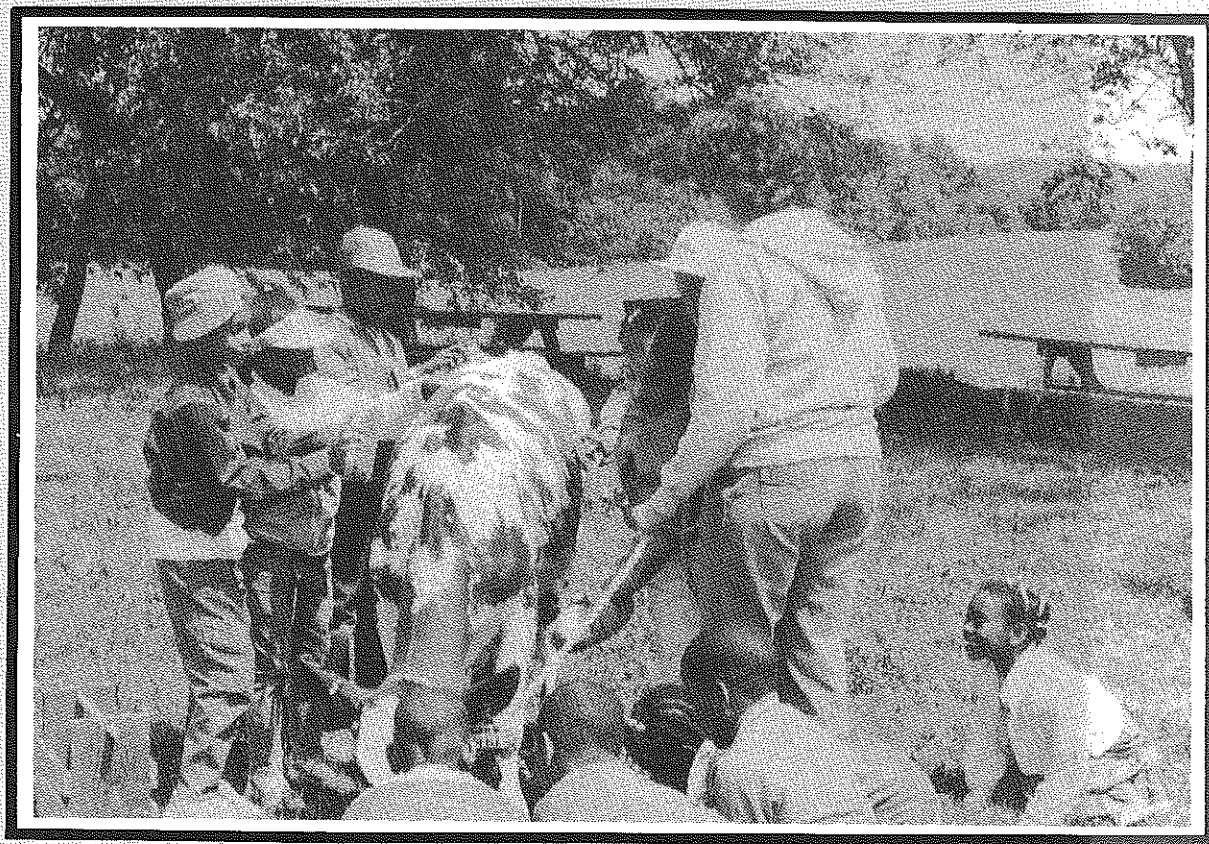


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Number 2



THEME:
Expanding The Audience Base

THE AGRICULTURAL EDUCATION MAGAZINE



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Table of Contents

	Page
THEME EDITOR'S PAGE	
Walking The Talk.....Phillip R. Zurbrick	3
THEME: Expanding The Audience Base	
The New 'Right Types' of AudiencesBlannie E. Bowen	5
Strategies for Teaching Nontraditional StudentsJamie Cano	6
The 1890 Institutions at 100Walter N. Taylor, Larry Powers, & Donald M. Johnson	8
The Magnet School Concept for Agricultural SciencesA. Ronald Attarian & James M. Kerr	10
The More Things Change, The More They Stay the SameElmore R. Hunter & Jeffrey P. Miller	15
Retaining Women in Nontraditional EmploymentSusie Whittington	18
FEATURE COLUMNS	
Computer Technology ResourcesMark G. Zidon & W. Wade Miller	4
ARTICLES	
Tribute to Don Erickson.....Robert Seefeldt	17
SUBJECT INDEX TO VOLUME 62	12
AUTHOR INDEX TO VOLUME 62	14
STORIES IN PICTURES	24

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Walking the Talk

What kind of man would live where there is no daring? I don't believe in taking foolish chances, but nothing can be accomplished without taking any chance at all.

Charles A. Lindberg

National Summit II, the 1990 version of The National Summit on Agricultural Education convened in St. Louis in May to outline the objectives and action steps for excellence in agricultural education. Building upon the vision spawned by Summit I and incorporated in "The Strategic Plan for Agricultural Education" the participants attempted to cultivate mutual trust, communication, cooperation and coordination. Recognizing that excellence is the product of both vision and teamwork, the participants set out to outline a system that will pull the profession not push it to an even brighter future.

Bob Moawad, addressing the assemblage via video tape, encouraged the profession to "... raise the ceiling on our old expectations." He pointed out that "... it is not who we are that holds us back ... it's who we think we're not." Certainly this advice was apt for those who were inclined to say, "... we are not capable of providing an agricultural literacy program" or "this is too big a job for agricultural education." Further, those who were intimidated by the expanded mission statement need to reread Charles Lindberg's statement heading this column. The agricultural education profession has developed a self image and a comfort zone as surely as the teacher who has taught the same lesson from the same lesson plan for the past 25 years. A comfort zone becomes a rut from which it is difficult to deal effectively with winds of change. In fact, agricultural education at the secondary school level will never be any more or less than a program of vocational agriculture unless the profession can enhance its self image and self talk. We must expose an enhanced mission and come to believe that what we say and do is worthwhile and can be accomplished. In fact, there is a vast number of students not currently served by agricultural education who could and would profit from an expanded agricultural program. Further, I would ask who is better prepared and more capable of providing an expanded educational program in agriculture than teachers of agriculture?

Those who concern themselves with artificial barriers to delivering an expanded mission are perhaps attempting to protect the status quo or are unwilling to venture outside of their personal comfort zone. Those who caution against the expanded mission for fear of losing funding must be reminded that historically funding has always followed good ideas. Failure to pursue a good idea for fear of losing funding is a sure edict for failure! If our forefathers would have



By PHILLIP R. ZURBRICK, EDITOR

(Dr. Zurbrick is Professor, Department of Agricultural Education, The University of Arizona.)

waited to develop agricultural education program until the passage of the Smith-Hughes Act, there would have never been a vocational agriculture program!

Hats off to the past, coats off for the future! It is time for the profession to roll up our collective shirt sleeves and get on with the job. We have had enough talk. Talk is cheap; action is needed to make the vision reality. It is time to "walk the talk!" The concept of strategic planning is two part. Initially, it was necessary to encourage bold innovative thinking to posit an expanded mission statement and goals based upon bedrock values. The second part of the process is to develop the tactical plan by which the mission and goals are to be achieved. Now we are talking about: 1) objectives, and 2) action steps specifically associated with each goal of the Strategic Plan.

It is essential to the concept of strategic planning that it not be confused with long-range planning as commonly practiced in developing "5-year program plans." Typically, a 5-year plan is based upon a current assessment of a program's strengths and weaknesses combined with forecasts of anticipated trends. Such a mode of planning has worked effectively when accurate forecasts of future trends are possible and where adjustments are minimal. Thus, the so-called long-range planning model is useful in dealing with evolutionary changes. In our current fast paced, information age, forecasting may not always be accurate. When predictions go awry, programs are forced to become reactive rather than proactive. Surely, it is obvious to all of us in agricultural education that we have been too reactive and have not been as proactive as is desirable.

Strategic planning is based upon creating what we want rather than attempting to anticipate what might be needed. Since it is not possible to accurately predict the future, it seems prudent to invent it. Strategic planning is thus designed to deal with revolutionary, not evolutionary, change. Such is the challenge to each and every member of the agricultural education family as we prepare and refine tactical plans in each state and for each educational education organization. I invite you to join in this exciting endeavor.

Computer Technology Resources

Computers in Agricultural Education: An Opportunity for Students

Computer games! Word processors! Spreadsheets! They are in schools throughout the country. Agriculture students use them in livestock and crop production, agricultural mechanics, and, in fact, in classes on all topics of agriculture. Camp, Moore, Foster, and Moore (1988) called computers remarkable tools that can be used in a number of ways in agriculture. Are students being short-changed if they are not given an opportunity to use computers in the agriculture class?

Kulik and Kulik (1987) and Clark (1987) debated the effectiveness of computer-based instruction. Kulik and Kulik reviewed 200 studies and concluded that students learn more and learn faster with the aid of computers. Clark contended that computers are only a means of instruction and do not affect student learning. Literature in agricultural education reveals a more favorable attitude toward the use of computers. The general philosophy is similar to that of Seidel (1982), pp. 20-21). He reasoned that:

- Our society must handle increasing amounts of information;
- Individuals need to become better problem solvers;
- Computers are a major component of the work environment to help solve problems and handle information; therefore,
- All persons should be computer literate.

In 1989, Zidon and Miller conducted a national survey of high school agriculture teachers to determine their perceptions of computer use by agriculture students. Six hundred questionnaires were sent to randomly selected teachers; 256 were returned completed. General conclusions from this survey are discussed below.

General Conclusions of Survey

The use of computers by agriculture teachers was still relatively new, with the average teacher having less than five years of computer experience. Most teachers rated themselves no higher than just able to get by in their ability to use specific programs. There was little or no relationship between the teacher characteristics and the amount students used computers. It is encouraging to note that the age of teachers does not seem to affect the amount students use computers in agriculture classes.

Where computers were used in secondary programs, they were used most often as a tool for instruction rather than as the object of instruction. In a small percentage of the schools (18.82 percent), classes were being taught about computers. This type of instruction may be more appropriate in computer science classes rather than in



BY MARK G. ZIDON AND W. WADE MILLER, SPECIAL EDITOR

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agriculture classes. Agriculture teachers should teach agricultural topics and use computers as a tool in this process. Insuring that students know how to operate computers can provide an opportunity for the agriculture teacher to cooperate with elementary or other high school teachers.

As a group, teachers generally agreed with statements indicating that students need to use computers as a part of their education. Teachers agreed most with the factor that computers improve success beyond high school. They disagreed with the factor that students need programming skills. Not surprising, teachers in schools where computers were used were more positive about the need for students to use computers than were teachers in school where computers were not used.

Computer programs most often used were word processing, educational games, decision aid programs, and drill and practice programs. Teachers rated educational games the highest for being motivational and educational. The longer a teacher owned a computer, however, the more he or she was likely to agree that educational games were a waste of time. Perhaps less attention should be given to games and more to be given to the use of spreadsheets, data bases, and decision aid programs. These computer programs are more readily adapted to the problem-solving method of teaching.

Computers were being used more often in agricultural production areas than in other agriculture subject areas. However, agricultural production was taught in more schools than were other subject areas. The use of computers by subject areas may have been more closely related to how

(Continued on page 20)

The New 'Right Types' of Audiences

When the Future Farmers of America and the New Farmers of America organizations merged in 1965, some 52,000 black youth enrolled in 1,871 segregated schools, enlarged the FFA to 454,000 members in 10,000 chapters (Bender, Taylor, Hansen, & Newcomb, 1979). Five years later, there were only 8,176 FFA chapters and 430,000 members. Why? Desegregation, fewer black farmers, school consolidation, and a host of factors meant that many black youth did not enroll in agricultural education.

For many black youth, respected role models ceased to exist when black agriculture teachers started disappearing in the 1960s. The impact is clear 25 years later. Few of today's agricultural education students, teachers, professors, and state supervisors are black or ethnic minorities. Based on the faces of participants in FFA, PAS, NYFEA, NVATA, AATEA, and NASAE activities, the number certainly won't approach 52,000. In addition, most who are even remotely familiar with the situation know that innovative intervention strategies are needed to reverse the downward spiral.

On an encouraging note, several researchers forecast an enlarged pool of minority students. Pine and Hilliard (1990) indicate that over the coming decade one-third of all public school students will be ethnic minorities. In a number of public schools, black and Hispanic youth already constitute the majority even though they are erroneously labeled as "minorities." In many rural public schools, farm youth are the best example of a minority group. Most projects indicate that this "minority" group will become even smaller because 2% of the U.S. population now feed the other 98% (and much of the world).

Pallas, Natriello and McDill (1989) offer some equally intriguing long range projections about America's students:

- White children were 73% of the school age population in 1982, but will be only 54% in 2020; blacks were 14.7% in 1982 and will be 16.5% in 2020. The major change will involve Hispanic students (9.3% in 1982, but 25.3% in 2020).

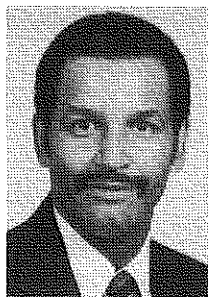
- The percentage of children who speak a primary language other than English will increase slightly from 2.5% in 1982 to 7.5% in 2020.

- The number of children living in poverty will increase from 21% in 1984 to 27% in 2020.

- A 30% increase is projected in the number of children not living with both parents (1984 vs. 2020).

- A 56% increase is expected in the number of children living with mothers who do not graduate from high school (1983 vs. 2020).

The above projects suggest that traditional agricultural education audiences are perhaps following the path of the black agriculture teacher. But, will the result be the same in 25 years? Yes, if agricultural educators continue to have less than a complimentary record of serving ethnic minorities, urban and suburban students, single parent



BY BLANNIE E. BOWEN, THEME EDITOR
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families, and others who aren't "the right types." Increasingly, Americans are deciding that traditional agricultural education programs are expendable. Many examples exist, but the following scenarios show that change does not mean the end of agricultural education.

Karen Siegel can't meet the demand for instruction in horticulture. Her students are mostly low income, ethnic minorities, elementary grade level, inner city, and Brooklyn, New York residents. Even a blind agricultural educator would not confuse these students with your typical vo-ag/FFA types. By any measure you choose, Siegel is successful. So successful, in fact, that in October 1986 Siegel's Public School #114 was officially designated as the Magnet School of Horticulture. "Every semester half of the school's 38 classes come to the greenhouse once a week for 45-minute lessons. The others work independently or in small groups at the greenhouse on special projects" (Stetson, 1988, p. 55). Siegel's success should not be attributed to superb leadership from teacher educators, state supervisors, or others in a profession that claims horticulture as an instructional area.

Similar stories are available at Philadelphia's Walter Bidle Saul High School and the Chicago High School for Agricultural Sciences. Not many students at these two magnet schools become American Farmers, officers, or winners of major FFA awards. However, these academically talented, urban, and mostly minority students don't suffer many ill effects. Jim Kerr and Ron Attarian note in their article that 65% of last year's seniors at Saul High School are pursuing college degrees. The Chicago students are recruited just as vigorously. What do parents, educators, and business leaders say when asked to judge the education that these Philadelphia, New York, and Chicago students are receiving? Most use expressions such as high level, successful, thriving, excellent, worthwhile, and meeting the needs of contemporary society!

Can the above success stories occur on a large scale? A resounding "yes" is the answer for individuals who have the vision and commitment to deliver an agricultural education for contemporary America. The challenges, however, will be enormous. Agricultural educators lack a track record to

(Continued on page 20)

Strategies for Teaching Nontraditional Students

In order to develop positive perceptions and an atmosphere of "belonging" in each student, there is a need to examine teaching strategies which make the educational experience more positive for nontraditional students. Current and future teachers of agriculture who are aware of the potential damaging effects that some educational experiences can have on nontraditional students should be able to select strategies which are designed to make all students, especially nontraditional students, encounter a positive experience while attending school.

If, as members of the profession of teaching, we take to heart the need for and inclusion of nontraditional students in our classrooms, certain guidelines must be followed. The ensuing suggestions will guide the future and practicing teachers of agriculture in planning instruction that supports a positive classroom environment for all students, especially nontraditional students, in the conventional classrooms of America.

Student Centered Instruction

Teachers do make a significant difference to many students, regardless of gender, age, disability or ethnic background. Teachers can make all students, especially nontraditional students, feel very special, or incompetent and worthless. Likewise, teachers can make the subject come alive, or make the subject extremely dull.

The focus of teaching, at least by tradition, has been to teach students subject matter (Pemberton, 1988). For example, in the teaching of history, teachers tend to let themselves think they are teaching history, not teaching students about history. When was the last time your students guided or became an integral part of the teaching-learning process?



Instructional approaches that match the learning styles of students must be used. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)



BY JAMIE CANO

(Dr. Cano is Assistant Professor, Department of Agricultural Education, The Ohio State University.)

In keeping instruction student-centered, teachers must insure that each student is reached directly in some way each day. Ask yourself in every class you teach: Have I had direct contact with each student? If not, make it a point to make contact with the student or students who may have been missed. Having more direct contact with students will tend to improve the students' attitude towards the subject matter and ultimately increase achievement (Banks, 1988).

Another strategy which may be used in retaining student-centered instruction is to incorporate into the instructional program "real-life" examples, some of which may be introduced by the students. In order to maximize student-centered instruction, student contact must be extended beyond the classroom. The direct contact could occur through Supervised Experience visits, luncheon meetings, and school hosted social gatherings.

Students as Individuals

During the visit outside of the classroom, the opportunity exists for the teacher of agriculture to learn more about the student as an individual. Additionally, the teacher will be better able to learn what the expectation level is of the student. Furthermore, the student will learn, on a one-on-one basis, the expectation level of the teacher.

The expectation level for each student must be individualized and realistic in terms of the student's ability. Learning about our students will confirm that as individuals, nontraditional students do not invariably fit the stereotypes which commonly affect teaching performance or effective teaching.

By taking time to visit with and learn about nontraditional students, teachers of agriculture can quickly detect an enormous variation among nontraditional students. Many of the differences found are brought about by such variables as previous academic preparation, experiences in the mainstream culture, socio-economic status, personality, and learning styles; the same variables which bring about differences in the traditional student.

Teachers of agriculture should make every student, especially the non-traditional student, welcome into their classroom. Prior to or after the class, the teacher should be available to allow for informal discussion about the subject matter or any other topic of mutual interest. The informal chit-chat which occurs will only strengthen and encourage classroom participation because the student will perceive a sense of belonging.

Encourage Nontraditional Student Participation

If the instruction reflects a student-centered approach, and if the classroom teacher has made a conscious effort to know his or her students, participation by nontraditional students in classroom discussions is more likely to occur. If nontraditional students do not seem to be motivated to participate in classroom discussion, it may be due, in part, to culture. Nontraditional students tend to be more quiet than traditional students in traditional classrooms (Chism, Cano, & Pruitt, 1989).



Opportunities must be provided for nontraditional students to acquire the desired occupational skills in an appropriate setting. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)

Other strategies which may be used to increase nontraditional student participation is to make eye contact with each student while presenting a lesson. However, if the student refuses to make eye contact with the teacher, the teacher should not take this lack of eye contact as personal conflict.

Finally, when dividing the class into groups for group work or projects, ensure that nontraditional students are represented proportionally in leadership roles (lab leader, project group leader). The confidence which a nontraditional student gains from such an experience may trigger the wanting to become involved in other activities, both within and outside the classroom.

Stress Nontraditional Accomplishments

Whenever possible, students should be exposed to or made aware of accomplishments by other nontraditional persons in the area of instruction. For example, if one was discussing the history of agriculture, the name and accomplishments of Booker T. Washington would be emphasized. In order for the student to have such exposure, the instructor will need to raise some issues involving nontraditional persons to open discussion.

When a teacher is not knowledgeable enough about accomplishments by nontraditional persons in a given subject area, it will be necessary to spend time in the library to find documentation of such scholarship. The library time should not be viewed as merely a "nontraditional hunting trip," but as a learning experience for the classroom teacher, and ultimately the students. Once documentation is found, the next step is to prepare the findings for presentation. In preparing the presentation, the teacher of agriculture must try to incorporate a variety of teaching methods.

Varying Teaching Methods

Traditionally, classroom teachers, especially at the secondary level, have relied heavily on the lecture method for teaching students. Often times when teachers are questioned about the extended use of lectures, the response generally is that lecture is the easiest method to use. Granted — that may be true, but to reach all students, alternative teaching strategies must be sought which take into account individual learning and cognitive styles of students.

All students have different learning styles (Anderson, 1988). The learning modalities are auditory, in which learners prefer to learn by listening; visual, where learners prefer printed material; and, tactile, where learners like to manipulate objects. Therefore, instruction must be altered to allow for all these learning styles.

In addition to learning styles, there are cognitive styles which must be considered when preparing a lesson. Just as students have different learning styles, students also have different cognitive styles. The cognitive styles are field independent and field dependent.

Field independent learners are those who try to analyze things into component parts and like to work independently. Field dependent learners are those who rely on external stimuli in approaching a task and have a much more difficult time separating the individual parts from within a whole. Generally, nontraditional students tend to be field dependent learners. Inversely, classroom instructors generally tend to be field independent learners and thus, use field independent teaching techniques.



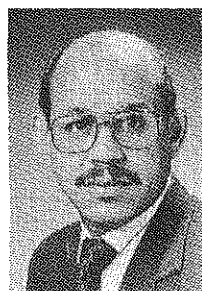
Parents and other adults can positively influence nontraditional students to choose agricultural education as a career area. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)

(Continued on page 22)

The 1890 Institutions at 100

In 1890, the United States Congress enacted legislation which was to become known as the Second Morrill Act. The primary purpose of the act was to increase federal financial support for the land-grant agricultural and mechanical colleges which had been established under the original Morrill Act of 1862. However, the most significant and enduring result of the 1890 act was the endowment of land-grant colleges for blacks. These institutions, predominantly located at southern states, are generally referred to as "1890 land-grant institutions" or, more simply, as "1890 institutions."

The purpose of this article is to briefly discuss the development of the 1890 institutions on the 100th anniversary of the passage of the Second Morrill Act. Specific topics will include: historical origins, fulfillment of the teaching, research, and extension missions; and possible future developments at these historically black land-grant institutions.



BY WALTER N. TAYLOR, LARRY POWERS,
AND DONALD M. JOHNSON

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Historical Origins

Two conditions existed in the years following the Civil War which would eventually lead to passage of the Second Morrill Act and the establishment of land-grant colleges for blacks. First, a critical need existed to increase federal financial support for the 1862 land-grant institutions (Edmont, 1978). Second, an equally critical need existed to provide educational opportunities for the nearly four million blacks who had been freed as a result of the Civil War (Mayberry, 1977).

On August 30, 1890, these two conditions resulted in the passage of the Second Morrill Act. In addition to increased appropriations, the Act contained the following provision:

Provided, that no money shall be paid under this act to any State or Territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment of and maintenance of such colleges separately for white and colored students shall be held in compliance with the provisions of this act . . . (p. 440).

As a result of this provision, separate land-grant agricultural and mechanical colleges for blacks were established in 16 states. This was accomplished by either designating existing colleges to receive land-grant funds or by establishing new colleges to receive the funds. Table 1 lists the 1890 land-grant institutions and provides information concerning each college.

TABLE 1. The Land-Grant Institutions and Tuskegee University

Institution (Present Name)	State	Year Established	Year State Accepted Provisions of the Second Merrill Act
Lincoln University	Missouri	1866	1891
Alcorn State Univ.	Mississippi	1871	1890
South Carolina State College	South Carolina	1872	1896
Univ. of Arkansas, Pine Bluff	Arkansas	1873	1891
Alabama A&M Univ.	Alabama	1875	1891
Prairie View A&M University	Texas	1876	1891
Southern University	Louisiana	1880	1893
Tuskegee University ¹	Alabama	1881	
Virginia State Univ. ²	Virginia	1882	1891
Kentucky State Univ.	Kentucky	1886	1893
Univ. of Maryland- Eastern Shore	Maryland	1886	
Florida A&M Univ.	Florida	1887	1891
Delaware State College	Delaware	1891	1891
North Carolina A&T State University	North Carolina	1891	1891
Fort Valley State College	Georgia	1895	1890
Langston University	Oklahoma	1897	189
Tennessee State University	Tennessee	1909	1891

¹Tuskegee University is a private school and did not receive funding under the Second Morrill Act. However, a traditional association exists between Tuskegee and the 1890 Institutions.

²Hampton University originally received federal funding under the Second Morrill Act. However, in 1920, Virginia State began receiving these funds.

Teaching, Research and Service

In the early years of the 1890 land-grant institutions, there was little commonality with respect to either the content or the level of programs offered. Academic programs were variously described as elementary, secondary, normal, and general education, with few indicating agriculture, home economics, and the mechanic arts. The most common purpose of these institutions at the turn of the century was the training of black teachers. These institutions have since evolved into a major national educational resource for (1) resident instruction, (2) agricultural research, (3) cooperative extension, (4) human resource and rural community development, and (5) international development. Today, one can find at these institutions the research capabilities, faculty expertise, and the grantsmanship to maintain well coordinated and viable teaching, research and extension programs (Williams & Williamson, 1985). The colleges and universities that comprise the 1890 land-grant institutions are committed and dedicated to the basic land-grant function, to scholarly competency, and the conduct of significant research to solve pressing problems and meet human needs.

For many years, much of the agriculture teaching at the 1890 institutions was aimed primarily at equipping students to deal with farm issues; research focused on improving the quality of life for small farmers; and extension distributed information to rural and urban families. Many of these aspects are still prevalent in the mission of these institutions, however, the missions have greatly expanded. Graduates of the institutions are providing leadership in a broad range of professions such as agricultural research, architecture, education, engineering, law, medicine and veterinary medicine. On the 1890 campuses, one can find sophisticated scientific basic and applied technical assistance to developing countries in many parts of the world (Williams & Williamson, 1985).

At 100, the 1890 land-grant universities are still a primary avenue for blacks to attain a college education. They continue to play a vital role in American agricultural research, teaching and extension. The teachers, researchers and extension professionals are dedicated to working together to teach agricultural students, assure technology transfer and continuing education and conduct research vital to the advancement of the food and fiber industry.

Future

The contributions that the 1890 institutions have made and continue to make in the development of human resources are apparent. The 1890 institutions have been especially significant for blacks and minorities, providing continued access to higher education. According to Williams and Williamson (1986) predominantly black institutions offer black students better odds for retention and attainment in comparison to other institutions. Given all of the changes occurring in society (social, technological, environmental, etc.) and the need to develop programs based upon current and future needs, this is an appropriate time to discuss the role that the 1890 institutions will play in higher education in the future. The environment in which the 1890 colleges function will ultimately determine which programs are needed, adequate and appropriate.

In order to gain insight relative to the role of the 1890 institutions, it is necessary to discuss certain events that will affect institutions of higher learning. John Naisbitt (1984) made some stunning projections for the future that may provide some insight into the role of the 1890 institutions in the year 2000 and beyond. Many of the things projected by Naisbitt are already happening. Naisbitt's projections covered many areas — the authors selected the high tech/high touch and the concept of a global economy.

"High tech/high touch," as suggested by Naisbitt, indicates that the future will have/a tremendous focus on technology and a renewed focus on humanity. This is already happening throughout American society and many countries throughout the world. The 1890 colleges are developing the infrastructure and securing the necessary resources (human, fiscal and physical) to provide high level technological experiences for their students, faculty, and staff. High-tech equipment/facilities such as computers and sophisticated communications systems are common in the 1890 institutions' classrooms, laboratories and offices. Emphasis is being placed upon securing world class scholars and state of the art teaching/research facilities to provide students with experiences in biotechnology, computers, research, etc. As it relates to high-touch, renewed emphasis is being placed upon the development of student appreciation for the environment and the natural aspects of life. This is being done through the teaching and advising process.

The "Global Economy" discussed by Naisbitt is being reflected in curriculum changes at the 1890 institutions. The faculty and student population at 1890 colleges reflect ethnic and cultural diversity. Many 1890 institutions are deeply involved in international agriculture projects and programs reflecting the changes projected by Naisbitt.

Conclusion

As the 100th anniversary of the passage of the Second Morrill Act is celebrated, alumni, faculty and students can take pride in past accomplishments of the 1890 land-grant institutions. They can also be assured that, in the future, these institutions will continue quality teaching, research and extension programs.

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The Magnet School Concept For Agricultural Sciences

W.B. Saul High School of Agricultural Sciences has been serving the Philadelphia, Pennsylvania, School District children since the early 1940's. The profile of the vocational high school has changed a lot since its inception. Initially, it was the Wissahickon Farm School, and as such, it provided hands-on vocational training to boys in the district who had been unsuccessful in traditional high school programs.

Today, Saul is a highly successful vocational agriculture high school, comprehensive high school, and magnet school, all in one. Students apply to Saul from all over the City of Pennsylvania. After applications are received, student grades, attendance, and standardized test scores are reviewed by the admissions office. Following this procedure, students are invited to the school with their parents for a personal interview. The interviews are conducted by paired groups of academic and agriculture teachers. The focus of the interviews is to determine if the candidates would be successful at Saul. The philosophy of the school includes a commitment to each student who enters that he or she will stay the entire four years, receiving a high school diploma and a certificate in vocational agriculture.

Saul High School has been a model program throughout the United States and the world. Visitors from all over the country and all over the world come to Saul High School to see this very unique program which combines hands-on vocational agriculture science training with academics in a well-developed across-the-curriculum program.



Courses in turfgrass technology and landscape and nursery production provide the preparation needed for a variety of occupations in urban and suburban areas. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)



JAMES
KERR

Not
Pictured

By A. RONALD ATTARIAN AND JAMES M. KERR

(Dr. Attarian is Administrative Assistant, Walter Biddle Saul High School of Agricultural Sciences; Mr. Kerr is Principal, Walter Biddle Saul High School of Agricultural Sciences.)

Students who are accepted to Saul must attend a 20-day orientation program in the summer prior to starting the regular school year. At the orientation, the students are exposed to the various programs and styles of education that have made Saul such a unique place to earn an education. Upon satisfactory completion of the summer orientation program, the students begin the school year in September as freshmen.

There are many choices for Saul students. They may elect an academic/college-bound program, or a non-college-bound program. They receive two years of exploratory vocational agriculture. In 9th and 10th grades, the students rotate through all of the agricultural areas in order to receive a well-rounded exposure to vocational agriculture science. Beyond the two periods a day of exploratory agriculture, the students attend all required academic classes that are required for graduation.

In the 10th grade, students are asked to select a specific agriculture science tract for 11th and 12th grades. In their final two years, the students will enroll in two 18 week in-depth courses each year. The agriculture curricula include: laboratory animal science, equine science, meat science, aquaculture, animal production, agricultural mechanics, retail florist business, greenhouse management, agriculture business, fruit & vegetable production, turfgrass technology, and landscape & nursery production.

Saul's academic courses include algebra, American history, biology, chemistry, computer science, elementary functions, english, general mathematics, geometry, physics, psychology, social science, spanish, trigonometry, and world cultures. Also included in the instructional program are physical education, health education, and Sholastic Aptitude Test (SAT) preparation.

Intramural sports are available to students both before school and after school. These include basketball, golf, football, soccer, weight lifting, archery, softball, tennis, and hockey. New to the program are junior varsity basketball and baseball.



Laboratory animal science instruction provides basic instruction in veterinary science. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)

The school is located in the Upper Roxborough section of Philadelphia in the Northwest corner of the city. The area is urban, but the approximately 100 acre campus is adjacent to Fairmount Park. This park is the largest park system within a city limit in the United States. Students are in an environment which is conducive to learning and appreciating the environment. For example, the equine science stable is located against a backdrop of trees, trails, running water, and wildlife. The campus is an all-day attraction where parents often are seen parked along the roadway, showing their children what a cow, deer, sheep, or horse looks like. The manure from the farm is composted along the roadway. Here, residents come with trucks, station wagons, automobile trunks, and trash cans, and help themselves to nature's fertilizer.

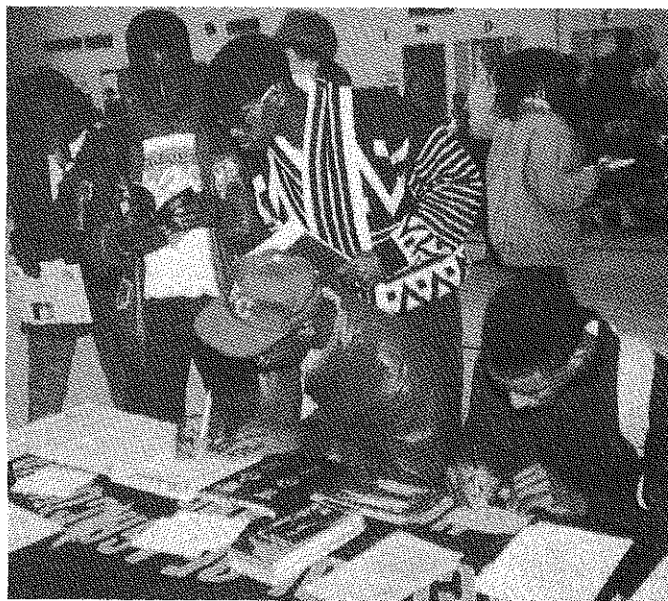
Saul's students learn by doing. The programs give students an opportunity to experience what they have learned in the classroom (living laboratories). Over 65% of last year's seniors went on to pursue degrees at the many colleges and universities that recruit throughout the school year. Last year's one-hundred plus seniors received over \$165,000 in scholarships. All students seeking gainful employment are able to find jobs at graduation.

Saul has a cooperative work study program, under the auspices of the FFA's Supervised Agricultural Experience program. Seniors are able to find employment during the second half of the year. Many of these supervised experiences lead to full-time employment following graduation.

The Pennsylvania Horticulture Society hires only Saul students to be the work crew for the annual spring

Philadelphia Flower Show. This is the largest and best horticulture exhibition anywhere in the world. These select students are able to learn a work ethic, earn money, manage to keep up with their school work while in an on-the-job setting, and see and meet many people in the field of horticulture.

Saul's students are constantly in contact with industry, either via field trips, on-the-job training, or participation in activities such as the Pennsylvania Farm Show, State FFA conventions, National FFA conventions, and local competitions.



Saul students are heavily recruited by colleges and agricultural industry. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)

Students come from all over the city, from every neighborhood, from public school, private schools, and parochial schools. They learn to mingle and work together. Typically, students are here well in advance of the first school bell. After school, many students are seen working with animals, working on projects, or playing sports. The school never closes because the animals and plants must be cared for appropriately. In addition to a full-time resident farmer, the school district employs a number of students to be assistant farmers. In this capacity, the students work nights, holidays, weekends, and summers in the barns, greenhouses, and fields.

W.B. Saul High School is an agricultural science high school with a strong science, hands-on philosophy. The school boasts many successful graduates, and the largest FFA chapter in the United States. Saul's students consistently take highest honors in local, state, and national contests. Saul was recognized as the best agricultural science high school in the Commonwealth of Pennsylvania in 1989. It is ranked among the best vocational high schools in the United States. The school offers individualized instruction for its approximately 600 students. The school boasts the highest attendance rate in Pennsylvania and, perhaps, in the country: 97%. A high quality agricultural science program is the "magnet" that attracts some of Philadelphia's best students to W.B. Saul.

Subject Index to Volume 62

- 80's in Retrospect**
 The 1980's: From Overalls To An Overhaul, *by Don Gill* . . . December
 The 1980's in Retrospect: Thoughts from a Supervisor, *By Richard Karelse* . . . December
 The 1980's in Retrospect: Thoughts from a Teacher Educator, *by David L. Williams* . . . December
 The 1980's in Retrospect: The View from Washington, *By Larry D. Case and Byron F. Rawls* . . . December
 A Vice President's Recollections: 1979-1982, *by Paul Day* . . . December
 A Vice President's Recollections: 1982-1985, *by Jim Guilinger* . . . December
 A Vice President's Recollections: 1985-1988, *by Floyd G. McCormick* . . . December
 A Vice President's Recollections: 1988 to Present, *by Dewey W. Stewart* . . . December
 The Council: A Historical Retrospective, *by John Pope* . . . December
 National FFA Foundation and FFA Alumni Association in the 80's, *by Robert W. Cox and Bernie L. Staller* . . . December
 Reflections of an Agriculture Teacher, *by William E. Fletcher* . . . December
 The Renaissance Age in Agricultural Education, *by Gary E. Moore* . . . December
 Student Organizations During the 1980's — FFA — A Decade of Progress, *by C. Coleman Harris and Wayne J. Sprick* . . . December
- A Health Profession**
 Agricultural Education — Is It Hazardous to Your Health?, *by Paul R. Vaughn* . . . June
 Can Students Learn In Your School Environment? *by Lyle Westrom* . . . June
 Health In the Teaching Laboratories, *by Glen M. Miller* . . . June
 Health Tips for Agricultural Educators, *by Michael E. Newman* . . . June
 Hardiness: It's Not Just for Plants, *by Deborah L. Finfgeld* . . . June
 How Healthy Are Agriculture Teachers?, *by Jasper S. Lee* . . . June
 Teacher Stress — Teacher Burnout: A Profession at Risk, *by Jamie Cano* . . . June
 Work, Is It Your Drug or Choice?, *by Gary S. Straquadine* . . . June
- A Mission Statement**
 A Mission Statement — Our Philosophical Anchor, *by L. DeVere Burton* . . . January
 A Vision and a Mission for Agricultural Education, *by Alfred J. Mannebach* . . . January
 Destiny Is In Our Hands, *by Larry D. Case* . . . January
 New Directions in Agricultural Education for High School Programs, *by James E. Wells and John D. Todd* . . . January
 Starting With the Vision — Succeed With the Plan, *by Daniel W. Zadra* . . . January
 Teacher Education: At the Heart of the Mission Reaffirm — Reform or Both?, *by William E. Drake* . . . January
- Agricultural Mechanization**
 The Basics Do Not Change, *by Joe G. Harper* . . . May
 Clouds Mean the Environment Is Changing, *by Joe G. Harper* . . . January
 Roger Has the Right Ideal, *by Joe G. Harper* . . . July
 Technology Education and Agricultural Mechanization, *By Joe G. Harper* . . . November
 Watch Out For Those Curves!, *By Joe G. Harper* . . . September
- Assistantships and Fellowships**
 Assistantships and Fellowships in Agricultural Education — 1990-1991, *by John Hillison* . . . January
- Book Reviews**
 Computer Skills and Parliamentary Procedure, *by David L. Howell* . . . June
 Family Farm/Livestock Judging, *by David L. Howell* . . . February
- Management — Farm and Classroom, *by David L. Howell* . . . October
- Computer Technology Resources**
 The Colors of Agriculture, *by W. Wade Miller* . . . October
 The Computer of "Your Future", *by Nat Jaeggli* . . . November
 Computer Pals: A Communication Activity, *by Nat Jaeggli* . . . March
 Do You Want to Telecommunicate? *by W. Wade Miller* . . . August
 Educational Technology in the Secondary Agriculture Program, *by W. Wade Miller* . . . February
 He Who Steals My Hard-disk Steals My Soul, *by Nat Jaeggli* . . . May
 Managing Information Electronically, *by W. Wade Miller* . . . April
 Rediscover the Spreadsheet, *by W. Wade Miller* . . . June
 Using the Computer to Develop Nontechnical Skills, *by W. Wade Miller* . . . December
- The Council**
 Agricultural Education Operating in an International Marketplace, *by John Pope* . . . April
- Delivering Agricultural Literacy**
 Agricultural Literacy: A Basic American Need, *by John Pope* . . . March
 Agricultural Literacy In Montana Schools — "Education About Agriculture" *by Leonard Lombardi and Bette Jo Malone* . . . March
 Delivering Agricultural Literacy, *by Warren D. Reed* . . . March
 Delivering Agricultural Literacy Through Mentor Teachers and Mentor Students, *by Jim Schulte, Dwight Barnes and Jean Landeen* . . . March
 Implementing Agricultural Literacy Programs, *by Dale A. Law* . . . March
 Incorporating Agricultural Literacy in a State Program of Agricultural Education, *by Warren D. Reed* . . . March
 Partnerships + Variety of Activities = Successful A.I.T.C. Programs *by Mark P. Linder* . . . March
 Young Farmers Involved in Agricultural Literacy, *by Wayne J. Sprick* . . . March
- Editorials**
 Agricultural Literacy — Why!, *by Phillip R. Zurbrick* . . . February
 An Over-Arching Mission, *by Phillip R. Zurbrick* . . . January
 Delivering Secondary School Level Agricultural Literacy, *by Phillip R. Zurbrick* . . . March
 Expanding the Horizons, *by Phillip R. Zurbrick* . . . August
 Experiential Education, *by Phillip R. Zurbrick* . . . June
 Importance of Teaching, *by Phillip R. Zurbrick* . . . September
 Leadership Development, *by Phillip R. Zurbrick* . . . November
 Occupational Value Adding, *by Phillip R. Zurbrick* . . . July
 Promoting the Work Ethic, *by Phillip R. Zurbrick* . . . April
 Reshaping Experiential Learning, *by Thomas L. Grady* . . . May
 Revolution in Agricultural Education, *by Phillip R. Zurbrick* . . . December
 Supervised Experience, *by Phillip R. Zurbrick* . . . October
- FFA Alumni - A Program Tool**
 "The FFA Alumni — A Program Tool," *by Robert W. Cox* . . . August
 FFA Alumni: An Educational Tool at Local and State Levels, *by Kevi A. Keith* . . . August
 FFA Alumni Coordinate Trip to National FFA Convention, *by Jack Elliot and Harry Gardner* . . . August
 FFA Alumni Plays a Vital Role in Governmental Affairs, *by Charles E. Miller* . . . August
 Is There an FFA Alumni in Your Future?, *by Gary L. Maricle* . . . August
 Unifying FFA Alumni Support for Agricultural Education, *by Joyce E. Sayer and Richard E. Linhardt* . . . August

Focus On Teaching	
A New Era in the Classroom: The Economics of Agriculture, by Stan J. Bevers and Fred J. Ruppel	September
Brighten Up Your Laboratories, by David Drueckhammer	September
Effective Teaching Requires Marksmanship, by Glenn C. Shinn	September
Excellence: The Teacher Makes the Difference, by Tony Brannon and Wes Holley	September
Protection From Hearing Damage, by Glen M. Miller	September
Student Behavior Problems, by Pierce Farragher	September
Teaching: Building a Climate for Success!!, by David Spotanski and Martin Frick	September
Teaching Deserves Our Focus, by David E. Cox	September
Ten Essential Elements of the Problem Solving Approach, by Harry Boone	September
Using Personal Warmth, by Eddy Finley	September
Global Education	
A Florida Perspective on International Agricultural Education, by Carl E. Beeman and Jimmy G. Cheek	April
Ag Ed's Role in Global Education: Unprecedented, by Robert A. Martin	April
Agricultural Education - A Model Program for Arab Nations, by Maynard J. Iverson	April
Linking Teacher Skills, Experimental Learning and Indigenous Knowledge Systems, by Don King	April
Middle School Agricultural Curriculum for Honduras, by Anamaria Varela and Lee Cole	April
Building Bridges of Understanding, by Randy Pingel, Dianna Strickler and Julia A. Gamon	April
International Agriculture	
Opportunities for Educators, by Janet L. Henderson	July
Instructional Materials	
My Lead or Yours?, by Rick Smith	November
Textbook Selections: What to Look For and How, by Jeff Moss and Kay Moss	July
Leadership Development	
Adapting the FFA in Urban Programs, by John Mulcahy	November
Cooperation . . . A Different Twist, by Jeffrey P. Miller	November
Developing Effective Adult Agricultural Leaders, by James T. Horner and Allen G. Blezek	November
Four Steps to Effective Leadership, by James Legacy and Famwole Oyeboode R.	November
Leadership for Agriculture: How Do We Avoid the Abilene Paradox? by Edgar Yoder	November
Leadership For Contests or For All Students?, by Clifford L. Nelson	November
Practicing Leadership Concepts in Agricultural Education, by Larry Powers	November
The Teacher As A Situational Leader, by Ray V. Herren	November
Other	
A Western Reaction to the National Research Council Report, by Dale Carpenter and Doug Bishop	March
Changing the Mission of Agricultural Education Through Curriculum Modification, by Maynard J. Iverson and Boyd F. Robinson, Jr.	February
Expanding Natural Resources Education, by David L. Williams and Eldon Weber	February
Impact of Leadership Development in Vocational Agriculture, by Lee Cole and Roy Durfee	November
Industry Experience to Update Competencies, by Ed Osborne	August
Integrating International Mechanics Into a High School Program, by William B. Symons and Joseph G. Cvancara	April
Leader in Agricultural Education: O. Donald Meaders, by Eddie A. Moore	August
Lessons from Women in the Agricultural Sciences, by Jeannette Rea, Janet L. Henderson, and Barbara E. Cooper	August
National Mission Statement for Agricultural Education	January
Position Statement on Agricultural Literacy, by Earl B. Russell, J. David McCracken and W. Wade Miller	March
Super Teacher!, by Thomas L. Grady	September
Reshaping Experiential Education	
Experiential Learning: A Matter of Style, by Tim Rollins	May
Focus on the Future: Reshaping Experience Programs, by Bob E. Stewart and Bob Birkenholz	May
From Project Method to SAE — Rethinking the Concept, by R. Kirby Barrick	May
Reshaping Experiential Education — What Experiences Are Best?, by Joe Townsend and Gary E. Briers	May
Reshaping SAE to Provide Experiential Learning in the 1990's	May
By Jimmy G. Cheek and Larry Arrington	May
Supervised Experience Record Keeping A La Carte or House Special?, by David E. Hall	May
Two Angora Goats, by Gary E. Moore	May
Software Sampler	
Application Software, by Kerry S. Odell	October
Electronic Grade Book Programs, by Jeffrey A. Wood	April
Small Engine Troubleshooter, by Jeffrey A. Wood	June
Software Development — What is Needed, by Jeffrey A. Wood	February
SOE For the Future	
Agricultural Proficiency Program, by Kim Balfe	October
Experiential Needs of Students in Agriculture Programs, by Floyd G. McCormick, David E. Cox and Glen M. Miller	October
Is SOE Destined to Become a Dinosaur?, by Douglas A. Pals	October
Linking Technology to SOE, by Terry E. Queen and Maynard J. Iverson	October
Production Experience Program: A New Look for the Future, by Richard J. Norris and Jack Harrington	October
Supervised Experience: The Success Story Continues . . ., by David L. Doerfert, Jack Elliot and Harry N. Boone	October
Supervised Experiences in Agriculture, by Gary E. Briers	October
Supervised Practice in the Science of Agriculture, by J. David McCracken and Edward E. Darrow	October
Teaching Tips	
Creative Use of Overhead Projectors and Video Cameras, by Ed Osborne	December
Demonstration Sparks Student Interest in Magneto Ignition System Operation, by Donald M. Johnson	June
Etiolate Banded Cloning, by Rose Jones	January
How's Your "Learning Mix?" by Rose Jones	July
Organizing for Cooperation, by Rose Jones	May
Turning SOE Program Expansion Into a Game, by Ed Osborne	April
Vocational Agricultural Education — Value Adding	
Agricultural Education — Value Adding, by Lou E. Riesenberg	July
Farm Management Education: Does it Pay?, by Edgar A. Persons	July
Value Adding: The Impact of Vocational Agriculture Programs on the Community, by Tom Klein and George C. Hill	July
Maximizing Experiential Learning: The Key to Value Added Education, by Gary Leske and Eric Zilbert	July
Effort Times (Education Plus Activities) Equals Value Added, by Scott Everett	July
Value Adding — The Leadership Component, by John P. Mundt	July
French Fries, Farms and Reforms, by L. Devere Burton	July
Education in Agriculture: Not Just a High School Matter, by Wayne DeWerff	July
Why Agricultural Literacy	
A State Plan for Agricultural Education, by Dale A. Law and Jerry D. Pepple	February
Agricultural Literacy: Challenge of the Nineties, by James G. Leising	February
Coming to Grips with Agricultural Literacy, by Marty Frick and David Spotanski	February
Reinforcing the Common Bond Between Urban and Agricultural Interests, by Len Richardson	February
Why, "Ag in the Classroom," by Shirley Traxler	February

AUTHOR INDEX

July 1989 - June 1990

Note: The Author Index presents author's name(s), month(s) of issue with article(s), and page number(s) in the issue.

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Arrington, Larry May, 12</p> <p>Balfe, Kim October, 20</p> <p>Barnes, Dwight March, 11</p> <p>Barrick, R. Kirby May, 23</p> <p>Beeman, Carl E. April, 6</p> <p>Bevers, Stan J. September, 8</p> <p>Birkenholz, Bob May, 17</p> <p>Bishop, Doug March, 20</p> <p>Blezek, Allen G. November, 6</p> <p>Boone, Harry September, 5; October, 6</p> <p>Brannon, Tony September, 12</p> <p>Briers, Gary E. October, 5; May, 9</p> <p>Burton, L. Devere July, 13; January, 16</p> <p>Cano, Jamie June, 13</p> <p>Carpenter, Dale March, 20</p> <p>Case, Larry D. December, 6; January, 6</p> <p>Cheek, Jimmy G. April, 6; May, 12</p> <p>Cole, Lee November, 18; April, 9</p> <p>Cooper, Barbara E. August, 20</p> <p>Cox, David E. September, 3; October, 10</p> <p>Cox, Robert W. August, 7; December, 20</p> <p>Cvancara, Joseph G. April, 22</p> <p>Darrow, Edward F. October, 12</p> <p>Day, Paul December, 8</p> <p>DeWerff, Wayne July, 14</p> <p>Doerfert, David L. October, 6</p> <p>Drake, William E. January, 10</p> <p>Drueckhammer, David September, 16</p> <p>Durfee, Roy November, 18</p> <p>Elliot, Jack August, 14; October, 6</p> <p>Everett, Scott July, 11</p> <p>Famiwole, Oyebode R. November, 14</p> <p>Faragher, Pierce September, 10</p> <p>Fingfeld, Deborah L. June, 18</p> <p>Finley, Eddy September, 15</p> <p>Fletcher, William E. December, 21</p> <p>Frick, Martin September, 7; February, 6</p> <p>Gamon, Julia O. April, 18</p> <p>Gardner, Harry August, 14</p> <p>Gill, Don December, 13</p> <p>Grady, Thomas L. September, 19; May, 3</p> <p>Guilinger, Jim December, 9</p> <p>Hall, David E. May, 14</p> <p>Harper, Joe G. July, 5; September, 20; November, 20; January, 9; May, 5</p> <p>Harrington, Jack October, 15</p> <p>Harris, C. Coleman December, 14</p> <p>Henderson, Janet L. July, 19; August, 20</p> <p>Herren, Ray V. November, 12</p> <p>Hill, George C. July, 9</p> | <p>Hillison, John January, 2</p> <p>Holley, Wes September, 12</p> <p>Horner, James T. November, 6</p> <p>Howell, David T. October, 17; February, 17; June, 20</p> <p>Iverson, Maynard J. October, 18; February, 20; April, 11</p> <p>Jaeggli, Nat July, 17; November, 5; March, 17; May, 21</p> <p>Johnson, Donald M. June, 8</p> <p>Jones, Rose July, 8; November, 8; May, 8</p> <p>Karelse, Richard December, 22</p> <p>Keith, Kevin A. August, 10</p> <p>King, Don April, 14</p> <p>Klein, Tom July, 9</p> <p>Landeen, Jean March, 11</p> <p>Law, Dale A. February, 10; March, 5</p> <p>Lee, Jasper S. June, 6</p> <p>Legacy, James November, 14</p> <p>Leising, James February, 4</p> <p>Leske, Gary July, 10</p> <p>Linder, Mark P. March, 7</p> <p>Linhardt, Richard E. August, 6</p> <p>Lombardi, Leonard March, 9</p> <p>Malone, Betty Jo March, 9</p> <p>Mannebach, Alfred J. January, 4</p> <p>Maricle, Gary August, 17</p> <p>Martin, Robert A. April, 4</p> <p>McCormick, Floyd G. October, 10; December, 10</p> <p>McCracken, J. David October, 12; March, 13</p> <p>Miller, Charles August, 4</p> <p>Miller, Glen M. September, 17; October, 10; June, 15</p> <p>Miller, Jeffrey P. November, 15</p> <p>Miller, W. Wade August, 5; October, 4; December, 5; February, 5; March, 13; April 17, June, 5</p> <p>Moore, Eddie A. August, 8</p> <p>Moore, Gary E. December, 4; May, 6</p> <p>Moss, Jeff July, 20</p> <p>Moss, Kay July, 20</p> <p>Mulcahy, John November, 17</p> <p>Mundt, John P. July, 12</p> <p>Nelson, Clifford L. November, 9</p> <p>Newman, Michael E. June, 9</p> <p>Norris, Richard J. October, 15</p> <p>Odell, Kerry S. October, 21</p> <p>Osborne, Ed August, 19; December, 17; January, 17; April, 20</p> | <p>Pals, Douglas A. October, 8</p> <p>Pepple, Jerry D. February, 10</p> <p>Persons, Edgar A. July, 6</p> <p>Pingel, Randy April, 18</p> <p>Pope, John December, 18; March, 8; April, 5</p> <p>Powers, Larry November, 10</p> <p>Queen, Terry E. October, 18</p> <p>Rawls, Byron F. December, 6</p> <p>Rea, Jeannette August, 20</p> <p>Reed, Warren D. March, 4; March, 15</p> <p>Richardson, Len February, 7</p> <p>Riessenberg, Lou E. July, 4</p> <p>Robinson, Boyd F. February, 20</p> <p>Rollins, Tim May, 19</p> <p>Ruppel, Fred J. September, 8</p> <p>Russell, Earl B. March, 13</p> <p>Sayre, Joyce E. August, 6</p> <p>Schulte, Jim March, 11</p> <p>Shinn, Glen E. September, 4</p> <p>Smith, Rick November, 21</p> <p>Spotanski, David September, 7; February, 6</p> <p>Sprick, Wayne J. December, 14; March, 19</p> <p>Staller, Bernie H. December, 20</p> <p>Steward, Bob R. May, 17</p> <p>Stewart, Dewey W. December, 11</p> <p>Straquadine, Gary S. June, 11</p> <p>Strickler, Dianna April, 18</p> <p>Symons, William B. April, 22</p> <p>Todd, John D. January, 14</p> <p>Townsend, Joe May, 9</p> <p>Traxler, Shirley February, 9</p> <p>Varela, Anamaria April, 9</p> <p>Vaughn, Paul R. June, 4</p> <p>Weber, Eldon February, 14</p> <p>Wells, James E. January, 14</p> <p>Westrom, Lyle June, 7</p> <p>Williams, David L. December, 12; February, 14</p> <p>Wood, Jeffrey A. February, 8; April, 8; June, 17</p> <p>Yoder, Edgar November, 4</p> <p>Zadra, Daniel W. January, 12</p> <p>Zilbert, Eric July, 10</p> <p>Zurbrick, Phillip R. July, 3; August, 3; September, 3; October, 3; November, 3; December, 3; January, 3; February, 3; March, 3; April, 3; June, 3</p> |
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The More Things Change, The More They Stay The Same

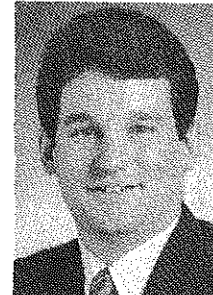
At the beginning of this century, a great deal of information about agriculture and home economics was coming from the state land grant universities. Unfortunately, farmers and homemakers who could put this information to good use were either not receiving it, or they refused to try the new ideas and practices that were being introduced. However, in several parts of the country some innovative people began to realize that a means of introducing new technologies to the adults was through the children. So, the idea of corn clubs for boys and canning clubs for girls was born. Today, those corn and canning clubs are known as the 4-H/Youth Development Program.

As we approach the 21st century, the idea of reaching an adult audience through a youth educational program has as much relevance today as it did almost 90 years ago. Instead of specifically teaching skills in agriculture and home economics, the emphasis is on developing the individual to his or her fullest potential.

Extension programs have the mission of trying to better the lives of all citizens. This also means that with the shrinking farm population we need to expand our clientele base beyond "traditional" extension programs. To make this expansion, urban audiences must be targeted for Cooperative Extension programs. The approach to be taken in expanding our urban audiences really isn't that much different from the way traditional extension programs have been conducted in the past. The following is an example of how the tried and true approach of traditional extension programming efforts will work today in an urban setting just as well as it works in a rural setting.



4-H members participating in the embryology project. (Photo courtesy of Elmore Hunter, County Extension Director).



By Elmore R. Hunter and Jeffrey P. Miller

(Mr. Hunter is County Extension Director, Philadelphia, Pennsylvania; Mr. Miller is Graduate Assistant, Department of Agricultural and Extension Education, The Pennsylvania State University.)

In Philadelphia County, Pennsylvania, extension is meeting the needs of city residents by expanding its programs to audiences who live in public housing developments. Tenants who live in public housing experience many problems which adversely affect their development into more productive citizens. Drug abuse, poor parenting skills, lack of recreational activities, low literacy rates, and poor nutritional habits are just a few of the problems that public housing tenants experience.

Can Cooperative Extension have an impact on an audience who is in desperate need of improved self-esteem, educated youth and adults, sound nutritional habits, and good family resource management? The answer is yes. Programs offered by extension need to be modified and delivered in a somewhat different manner, but the basic educational material and techniques used are sound and effective.

Urban Programming for Adults

In 1988, the Philadelphia Housing Authority approached extension to develop a partnership that would enhance the quality of life for residents in two public housing sites, Southwark and Norris Homes. The housing authority identified the areas of youth development (4-H), family resource management (family living), pest control (entomology), and nutrition (Expanded Food and Nutrition Education Program, EFNEP) as potential program areas. Since the Philadelphia Extension Office was already offering programs in the areas that were identified, the staff felt they were ready and willing to educate this "non-traditional" audience.

Personnel from the Philadelphia Housing Authority provided training on the characteristics of public housing and

The More Things Change, The More They Stay The Same

(Continued from page 15)

public housing residents for the extension staff to alleviate any fears and concerns that they may have had. Housing Authority and extension staff members then met with the tenant councils of each location to discuss and agree upon specific subject matter, delivery methods, location, and length of the programs.

Sessions with the tenants proved to be the most fruitful and rewarding because the extension staff and program participants were creating a partnership. This, of course, is the first major step that has to be taken in effective program development. If extension is to be successful with any audience, but especially with non-traditional audiences, we must be willing to forge and build partnerships which are designed to meet the needs and concerns of the clientele.

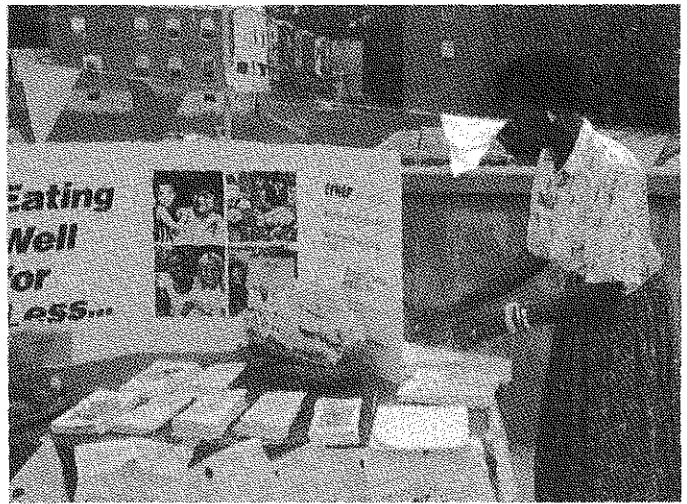
The Expanded Food and Nutrition Education Program (EFNEP) met with the parents of young children at both housing locations once a week for 12 weeks. They worked on improving food buying habits, meal preparation with low cost foods, menu planning, using nutritious snacks, and managing family resources. Forty-four parents enrolled in and completed the program.

As the parents became a more closely knitted group, they took on some of the same characteristics of a homemakers group. They would meet to identify, discuss, and solve common concerns. Sounds like a "traditional" extension homemakers group, doesn't it? At the end of the EFNEP program, the participants were evaluated and graduated from the program. All had an increased knowledge of resource management and nutrition. The most significant element in this story is that two-thirds of the participants in the program are still meeting as an extension homemaker group seven months after the EFNEP program officially ended. Helping people take responsibility for their own lives sounds like traditional extension programs.

The Philadelphia Extension program also offered three sessions on eliminating household pests. The public health entomologist, housed in the Philadelphia Extension Office, taught the public housing residents how to identify and safely eliminate common household pests. The residents were also taught proper techniques in food handling as a means of keeping pests from returning.

Urban Youth Programming

The most successful extension program in the two public housing sites has been the 4-H/Youth program. Over 125 youth at Norris and Southwark have enrolled in embryology, terrarium, hydroponic, woodworking, career awareness, good grooming, and nutrition projects. In addition, two senior teen councils and two junior 4-H councils have been formed. The senior groups have taken trips to Howard University in Washington, D.C., Morgan State University in Baltimore, and Penn State University. All three groups have attended a variety of plays, cultural activities, and sporting events, and have visited several museums.



Extension Food and Nutrition Fair at the Housing Authority in Philadelphia. (Photo courtesy of Elmore Hunter, County Extension Director).

The objectives of the 4-H/Youth program in a public housing project in the inner city are the same as a 4-H/Youth program in a rural setting: to help young people improve their knowledge and skills in an identified subject matter area (project), improve their cultural awareness, learn skills that help them get along with others, and develop a value system which will help them become productive citizens in today's society. Sounds like "traditional" extension 4-H/Youth programs, doesn't it?

If there has been one 4-H program that has been very successful in Philadelphia, it is the "Leadership Skills You Never Outgrow" project that was developed in Illinois. The program offers youth an opportunity to learn about themselves as individuals and develop skills in interpersonal communications. They then learn how to apply their new leadership skills and what they have learned about themselves into group processes.

The leadership skills project is the basis of the teen council programs. There are eight 4-H teen councils in Philadelphia. The teen council members and their adult volunteer leaders all participate in the leadership skills program. The training involves over six hours of formal instruction, plus many more hours of informal teaching. As a result of the leadership skills program, over 175 youth (including the housing authority teen groups) have participated in community service projects, intergenerational projects, tutorial and peer counseling groups, 4-H teen ambassador programs, and job training programs. Teens becoming productive citizens. Sounds like traditional extension, doesn't it?

Two Lessons

There are two lessons to be learned from the Philadelphia experience. First, expansion of the clientele base into non-traditional audiences can be done with good success. Second, collaborating and working with other agencies is one means of expanding your clientele base. Linkages with other groups in the community not only help develop and expand our programs, it also helps in developing the overall well being of the community.

(Continued on page 21)

Tribute to Don Erickson

"My first memories of Don Erickson are of me listening to his daily radio program, Vocational Education on the Air, in which he interviewed people involved in all aspects of vocational education. Even then, before I actually knew him, I felt pride and respect for all he did to help young people advance, not only through vocational agriculture and the FFA, but as they went on to their chosen careers.

"After being elected a state FFA officer for North Dakota, I did get to know Don Erickson personally. The respect and admiration I had previously only grew. I can't count the times he was there to assist me, especially when I needed advice. Even though he didn't always say what I wanted to hear, I knew his words of wisdom were only meant to help me in the best possible way.

"I can't say enough about Don Erickson. I know I would not be half the person I am today without his guidance and support. He was truly a special man!"

These sentiments were expressed by Tammy Meyer, a former North Dakota state FFA officer who is currently serving as Education Specialist in Cooperative Education for the U.S. Department of Agriculture. Like countless others, she was influenced in her profession by Don Erickson, the big, hearty Vo-Ag teacher and state supervisor from North Dakota. For more than four decades, the name Don Erickson was associated with good humor and a dedication to making vocational agriculture and the FFA a meaningful part of thousands of young peoples lives.



DON ERICKSON



BY ROBERT A. SEEFELDT

(Mr. Seefeldt is FFA Program Specialist, National FFA Organization.)

Don came from a very humble background. He was born above the Farmer's Store in Ontario, Wisconsin, and grew up and went to school in the Badlands of North Dakota. He worked his way through college by washing dishes, sling-ing hash and by singing with a band at the Golden Bubble nightclub.

His professional career began in 1940 when he accepted a position as vocational agriculture teacher in Rugby, North Dakota. (Can you believe for an annual salary of \$1800!) The vocational agriculture/FFA program at Rugby soon became a model for other schools across the country. In his 29 years as a teacher, Don had 135 State Farmer Degree recipients, seven American Farmer Degree recipients, 20 state FFA officers and one national officer. Rugby also received a gold chapter rating for 17 consecutive years.

"Early in my career as a vocational agriculture teacher, the Minnesota leadership brought this big, energetic, enthusiastic teacher from Rugby, North Dakota, to St. Paul to provide an in-service workshop," recalled Dr. Osmund Gilbertson of the University of Nebraska. "I'll never forget how impressed I was with his program at Rugby and the presentation he made."

Don credited much of the school's success to his students and their families. He was often heard saying, "I never had a kid I disliked or one that I had a discipline problem with." He credited much of this to the tremendous parental support in those days.

Of course, the reason behind the students' interest was Don himself. According to an article published in the local paper at that time, Don "has the gift of enthusiasm, without which no teacher is much good. He gets everyone into the act and . . . has the ability to discover and develop such talents as he finds in every boy."

Don was also a man of vision. He organized a Foundation for the Rugby FFA Chapter in 1947, long before Foundations became a popular means of financial support for the FFA at the state and national levels.

Don's teaching career ended in 1969, when he became state supervisor. In this position, he worked tirelessly on behalf of vocational agriculture and his adopted state, becoming

(Continued on page 21)

Retaining Women in Nontraditional Employment

In 1974, over a quarter of all women were employed in five occupations: secretary, elementary school teacher, retail sales clerk, bookkeeper, and waitress (Becker, 1980). These women were earning only 59% of what men were earning (Shuchat, 1980). The economic demands of operating a household in modern society forced women to seek non-traditional employment. By 1980 over 44 million American women constituted over 40% of the workforce in the United States (Enman, 1981).

Women in Agriculture

Early studies of women in agriculture suggested that agricultural education was a profession that offered a place for women (Ries, 1980). In 1981 the number of women enrolling in agricultural courses in California had increased at least three times faster than enrollment of men. In Ohio, the number of female agriculture teachers had risen to 8% of the vocational agriculture teaching population by 1988.

Why are women needed in the profession?

During a time when low enrollment is a problem in agricultural programs across the nation, and during a time when women's issues are prevalent nationally and internationally, women working in nontraditional agricultural careers represent positive role models. Women in agriculture are role models for each other, for aspiring nontraditional agricul-



Positive role models are needed by women who choose nontraditional agricultural careers. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)



BY SUSIE WHITTINGTON

(Ms. Whittington is Graduate Research Associate, Department of Agricultural Education, The Ohio State University.)

turalists, and for nontraditional occupations outside of agriculture.

As well as serving as role models, women are needed to bring a different perspective to a traditional field. Studies in psychology show that gender differences exist for approaches to solving problems, for relationships with people, and for willingness to accept certain responsibilities (Sprinthall & Sprinthall, 1987). Women, therefore, have an opportunity to contribute a different approach, a unique style, an unusual idea or a noteworthy perspective.

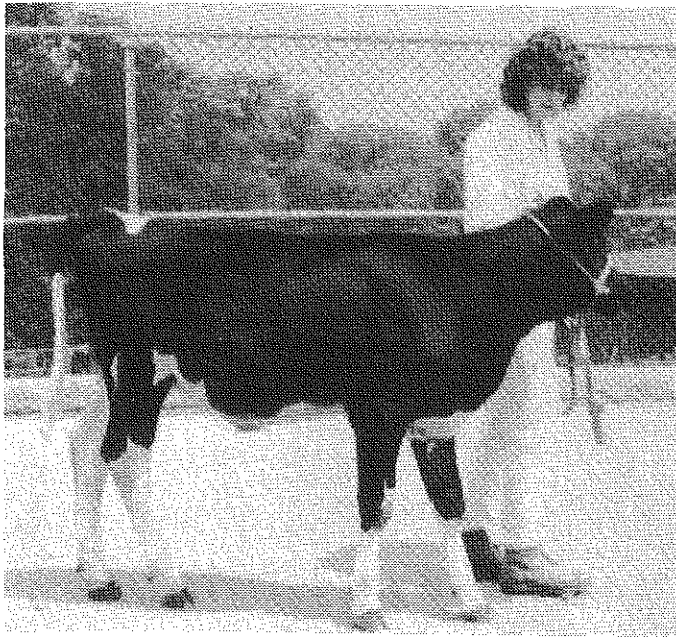
Women throughout history have provided much of the silent leadership in agriculture. They have made major farming decisions, scientific discoveries, and worked long, hard hours for the advancement of agriculture. Women deserve to publically work in and draw a salary from a profession where they have been a valuable part of its evolution.

Why are women leaving the profession?

The pressure or support given to women by co-workers, friends and family seems to be the greatest factor contributing to success or failure of women in nontraditional employment (U.S. Women's Bureau, 1978). Reports of unfair ratings on work performance, difficulty getting time off, violent language, salary differentiation, doing work that counterparts do not have to do, not being kept up-to-date, insults, and innuendos were found by Kendall (1983) to be problems among people in nontraditional settings. Knight (1986) found that female vocational agriculture teachers reported being discriminated against and harassed.

Among other reasons for the loss of nontraditional employees are the factors associated with the responsibility of caregiving. Whether caring for children or caring for an elderly adult, or a handicapped friend or family member, the pressures of caregiving can be very misunderstood by traditional employees.

Lack of confidence in the area of technical competence has been reported as a reason for the loss of nontraditional employees in the agricultural profession. With agriculture changing so rapidly, it is difficult to find the time to build regularly needed technical inservice into the already hectic schedule.



Women who are recruited into agricultural education are successful in all instructional areas. (Photo courtesy of James Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA.)

Women have also reported lack of opportunity to take leadership responsibility in their professional organizations as a problem in nontraditional employment. Teachers who are challenged by leadership roles will last only a short period of time in a profession where they are not encouraged to utilize their talents for the advancement of their professional organization.

Keeping Nontraditional Employees in the Profession

According to the National Commission on the Observance of International Women's Year (1976), "attitudes about appropriate roles and behaviors for females and males are deeply embedded in our culture and are not easily changed." Note they said "not easily changed" — they did not say "could not be changed." Thus, suggestions exist for moving the profession toward retaining women in agricultural education.

1. Kane (1978) and Knight (1980) proposed that two strategies that offered opportunity for success among women teachers of vocational agriculture were support groups and role models. States should develop programs to encourage interaction among the female teachers within the state. In states where there are fewer women teachers, support should be encouraged between states. Role models could be as close as the next hallway. It is particularly important for new nontraditional teachers to be introduced to and encouraged to interact with positive role models. Support groups and role models could make a difference in the longevity of nontraditional employees.
2. Support of family seems to be a major factor in the success of women in nontraditional careers. Principals, supervisors, directors, and teaching partners could promote more support for the teacher from the home (parents, spouse, or children), by sending letters of praise,

thanks, and encouragement to the home. Pride from the home in the woman's accomplishments outside the home could help encourage women to remain in a nontraditional occupation.

3. Child care facilities within schools could generate the feeling among nontraditional employees that they are important enough that the school wants to assist in their success. Relieving the burden and guilt often associated with the "women-children-career" syndrome could make great strides toward retaining women in nontraditional careers.
4. Educating schools regarding what constitutes sex bias, sexual harassment and sex discrimination could be enlightening for many. The real educational breakthrough, though, for assisting women in nontraditional careers, may not be in defining the terms to traditional employees, but rather in explaining to them the feelings and emotions associated with living with and dealing with such annoyances in the work place. A better heart-felt understanding of the symptoms of sex bias, sexual harassment and sex discrimination could begin to close a gap which interferes with the satisfaction of nontraditional employees.
5. Women in agriculture should not feel technically incompetent. Men and women alike share in the frustration of staying up-to-date in a field that changes as rapidly as agriculture. Women should not feel as though men see them as incompetent. In fact, a recent study in Ohio revealed that male teachers of vocational agriculture rated women counterparts as highly competent in technical agriculture. Men and women should be encouraged to exchange ideas regarding technical agriculture as one expert would exchange ideas with another. This would be a great step toward building confidence of nontraditional employees in agriculture.
6. Cano (1990) found that male vocational agriculture teachers would vote for female agriculture teachers to be officers in the state professional teachers organization. Women need to resist the temptation to shy-away from their professional organization out of fear of lack of acceptance. Many women have the ability and desire to succeed in their professional teachers organization and many men are willing to support them in their quest. Wonderful progress could be made for retaining women in the profession if women would seek leadership positions in the professional organization and men would support their ability.

Conclusion

Women are being found in greater numbers in the agricultural workforce, yet often, traditional attitudes regarding caregiving, technical competence, professional involvement, and gender issues hinder the profession from establishing a longevity record for women. Listed in this article are but a few of the possibilities for creating a work environment that can be enjoyed by everyone in the profession.

Women are a valuable part of the agricultural education profession. Those involved in the profession, men and women, have an obligation to do everything possible to encourage the retention of competent women in agricultural education.

(Continued on page 23)

Computer Technology Resources Computer in Agricultural Education: An Opportunity for Students

(Continued from page 4)

frequently subjects were taught to the appropriateness of using computers for teaching a specific subject. Teachers should use computers more in all subject areas. This may occur when teachers increase the time they devote to a subject not currently taught.

Teachers in schools where computers were not used did not feel that computers were too technical for students. Nor did these teachers feel that computers wasted too much teacher time. They did agree that teachers are not equipped to teach with computers. Reasons for this included the lack of hardware, usable software, and appropriate training.

Summary

The National Commission on Excellence in Education (1983) and the Committee on Agricultural Education in Secondary Schools (Carlson & Robbins, 1988) both recommended an increase of computer-based instruction in high schools. Results from this study indicate the use of computers is still in an early developmental stage. More education and in-service is needed to improve teachers' computer skills to help make this happen. Perhaps improving teachers' skills will result in a subsequent increase of student use of computers.

A wider variety of computer use is needed. Although students may benefit from word processing and educational games, they should also be exposed to other software types such as spreadsheet, telecommunications, and data base programs. Computer use should also be encouraged in all agriculture topics. The most frequent specific use of computers was that of educational games used to teach livestock production. There were not sufficient data collected, however, to determine if a specific type of software is more suited to teach a particular topic.

If Clark was right in stating that students do not learn more from computers, then there may be no need for concern. If Kulik was right, however, in determining that computers increase student learning, then agriculture teachers need to provide more computer-based opportunities for their students. These computer-based experiences can provide opportunities for students to (a) become more proficient at operating computers, (b) apply computer learning in their area of interest, (c) increase their awareness of computer applications, and (d) prepare for a future that is certain to include the use of computers. Clark may be right in stating that computers do not significantly increase the ability of students to learn. Even so, the benefits warrant the increased use of these teaching tools.

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The New 'Right Types' of Audiences

(Continued from page 5)

show that they can effectively educate inner city, suburban, minority, academically talented, and elementary grade students. In addition, Pine and Hilliard (1990) write that at least 20% of an organization's members must be of minority groups to diffuse stereotypes and other negative factors.

Authors writing in this issue are delivering formal and nonformal education for various audiences. Most are finding that they're breaking new but fertile ground. They are

discovering "New Right Types of Audiences." Their perceptions are enlightening.

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The More Things Change, The More They Stay The Same

(Continued from page 16)

"The more things change, the more they stay the same," is a popular saying in many circles. The example of the Philadelphia Extension program illustrates this point very well. Even though extension has its roots and traditions in rural agriculture and home economics programs, the methods that have been used for almost a century will work today in an urban setting. We sometimes get caught in a paradigm where we fail to see that our programming efforts can be used in

a variety of settings with a variety of clientele.

If one were to take a close look at the Philadelphia Extension Program, what he or she would find is an extension program that is as "traditional" as the one being conducted in the most rural county in America. The only difference is that in Philadelphia, the work is being done with a non-traditional audience. Our methods are sound. We just need to look beyond our "traditional" paradigm and be willing to expand and work with audiences that we haven't had contact with in the past. The Philadelphia Extension staff are demonstrating that what worked at the turn of the century, still works today. The more things change, the more they stay the same.

Tribute to Don Erickson

(Continued from page 17)

a one-man show promoting North Dakota. (As Don liked to joke, as much as he loved North Dakota, he was actually born in Wisconsin — because he wanted to be close to his mother.)

According to Floyd McCormick, Professor of Agricultural Education and Head Emeritus, The University of Arizona, "Don Erickson was a person of many talents and attributes. He was a master teacher, a humorous storyteller, a prolific writer, a talented radio announcer, an inspirational speaker, a challenging state supervisor, a champion of the FFA and an innovative leader in agricultural education. But most of all, Don loved people. Don possessed a solid vocational philosophy which dedicated his every professional endeavor. His success at placing his students in agricultural careers was exemplary. He utilized SOE programs to perfection and the FFA to develop his students to their maximum."

Butch Haugland, a North Dakota agriculture instructor, stated, "I doubt if the FFA and the state of North Dakota have ever had an ambassador for agriculture education work so hard on their behalf. He was a fanatic when it came to promoting our programs and our people. It is hard to imagine how anyone half his age could have had his energy."

Over the years, Don expanded his efforts and got involved in other vocational agriculture endeavors. He wrote the National FFA Student Handbook and the accompanying Advisors Guide. He hosted a two hour radio show, co-directed the National FFA Talent program with his wife Martha, and became a popular speaker at conferences — famous for his wit and extensive knowledge of North Dakota trivia. From the time that he retired as state supervisor in 1982 he traveled in 47 states and spoke at agricultural functions in most of them. Don also was an active member of the committees that conducted the National SOE workshops in 1982 and 1984.

However, his field of knowledge was not limited to agriculture affairs. He was an extremely well-read man with a wonderful sense of humor. Proud of his Scandinavian

heritage, he earned the nickname "The Big Swede," and loved telling, of all things, Norwegian jokes. (His favorite was to go to a bar and order a Norwegian 15, which was Seagrams 7 and 7 Up.)

He was also a civil war buff. One time, during a visit east to Washington, D.C., he and I decided to tour the Manassas Battlefield. After the second stop of the guided tour, Don began relating more facts than our assigned guide. By the end of the tour, he had become the undisputed leader, while our official guide merely followed behind him. What is amazing is that this was Don's first trip to see the battlefield. His knowledge about the battles all came from his extensive reading.

During Don's long and illustrious career he was the recipient of many awards. He was North Dakota's first recipient of the John Wayne American Medal. In addition to the honorary State Farmer and American Farmer degrees he received recognition as North Dakota's Agriculturist of the Year, State Alpha Zeta Man of the Year and a host of other awards. Don will also be honored posthumously as an FFA Achiever at the 1990 National FFA Convention and in the FFA National Hall of Achievement.

When Don died of cancer last November, the FFA suffered an irreplaceable loss. No one that I know has contributed more to the FFA organization than Don Erickson or set a better example for our young people.

As a memorial to Don's nearly 50 years of service to vocational agriculture the Rugby FFA members have had a mural painted on a wall outside of their vocational agriculture classroom. The mural depicts farming scenes of the past, present and future. Don's photograph is hung above the mural.

As Butch Haugland said, "To many of us, he was a teacher, a leader, a supervisor and an inspiration. But to all of us, he was a friend. Not only have we lost a great professional, but we have also lost a greater person. I wish we could have had Don for a few more years, but I thank God we had him as long as we did."

Strategies For Teaching Nontraditional Students

(Continued from page 7)

If nontraditional students are field dependent learners and teachers are field independent teachers, it is obvious that utilizing field independent teaching techniques is not most effective when teaching nontraditional students. The overall objective is to adjust the teaching style to match the students' cognitive style to maximize the teaching-learning process.

Another strategy that can be incorporated into the total classroom experience is to use peer teaching as well as teacher directed teaching. Also, as a classroom teacher, do not undervalue experience as a source of knowledge and over-rely on abstractions.

Finally, when assigning homework and projects, be flexible about time or choice of assignments, if this will enable more to succeed. Furthermore, when assigning projects, the teacher must make sure that the project is within the range of capability of nontraditional students. Once assignments or projects have been turned in for grading, the teacher must offer as much positive reinforcement as possible to encourage the nontraditional student to succeed.

Provide Positive Reinforcement

In providing positive reinforcement, the reinforcement must be prompt, honest, and frequent. However, if a non traditional student needs to be criticized, that criticism should be offered tactfully. Additionally, while providing positive reinforcement, the teacher of agriculture has an obligation to assist the students in setting realistic goals, and

reinforcing and support those goals. While providing reinforcement to the student, the teacher and student should also discuss overall performance on the part of the student. The teacher may also want to provide some self evaluation activities so that the students may continually evaluate themselves and remove any doubts about performance.

Summary of Teaching Strategies

In summary, there are several teaching strategies which should be taken into consideration to reach all students regardless of subject matter. Special consideration should be given to providing student-centered instruction and in getting to know all students, both in and out of the classroom environment.

While incorporating nontraditional students in all aspects of the classroom experience, the teacher must make an extra effort to learn about the accomplishment and contribution of nontraditional scholars in the area of study. Finally, because all students do not learn in the same manner, the classroom teacher should make every effort to utilize various teaching techniques in the classroom. At the same time, the teacher should provide positive reinforcement and reward students for the contributions and accomplishments made during class.

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About the Cover

Philadelphia 4-H members visiting a dairy farm in a neighboring county. Early experiences with agriculture must be provided to ethnic minorities and urban students. Recent research at Penn State University by Scanlon, et al., indicates that by the 8th grade students have decided whether or not they will enroll in agricultural education courses. (Photo courtesy of Elmore Hunter, Philadelphia County Extension Director.)

Retaining Women In Nontraditional Employment

(Continued from page 19)

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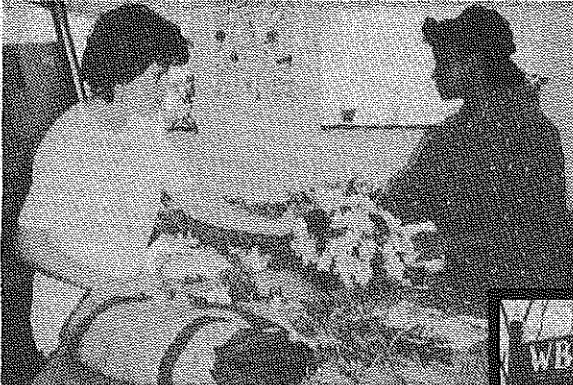
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Stories in Pictures

The Many Faces of W.B. Saul High School of Agricultural Sciences

The Pennsylvania Horticulture Society hires only Saul students to be the work crew for the Philadelphia Flower Show, the largest horticulture exhibition in the world.



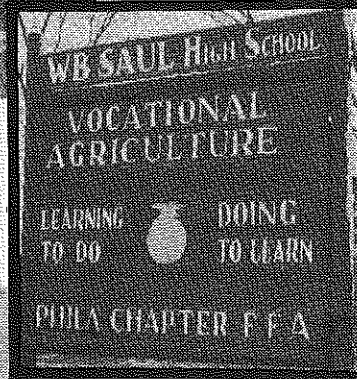
Equine science is one of many highly specialized courses being offered.



W.B. Saul is home to the largest



Even though students participate in a variety of intramural sports, 65% of last year's seniors are pursuing college degrees.



FFA chapter in the U.S.



Students acquire many hands-on experiences in emerging areas such as aquaculture.

(Photos courtesy of Jim Kerr, Principal, W.B. Saul High School of Agricultural Sciences, Philadelphia, PA).