 THEME: The New Decade
The New Decade

The decade of the 80's has arrived! New challenges are facing vocational education in agriculture/agribusiness, while at the same time many of the challenges of former years remain. How will the multiplicity of challenges be resolved? How will our profession cope with the forces which impact on it?

The direct impact on vocational education in agriculture/agribusiness may be felt directly by two major categories: internal and external. The internal forces are those that arise within the field itself. They evolve from the leadership (or lack of it) of which all of us are a part of the profession. This includes teachers, supervisors, teacher educators, and others in the vocational education family. The quality of local secondary and postsecondary programs is one of the benchmark internal forces by which our profession is judged by those outside of it. It behooves each of us to exert every effort to see that we have quality programs at the local level. This will be best realized through excellence in teacher education, supervision, and local programmatic activity.

The external forces include all aspects of the environment in which the profession functions. Trends in agricultural industry, government policies, citizen values, and the education profession in general are examples of these forces. Vocational education in agriculture/agribusiness must be responsive to these external forces. Further, our profession must assume a leadership stance which will allow it to participate in the shaping of these trends. Our profession must lead and remain in the mainstream of the community of agricultural industry.

Dialogue within our profession will facilitate the processes involved in assuming a strong leadership stance. It will allow all members of the profession the opportunity to participate in molding our destiny. The AGRICULTURAL EDUCATION MAGAZINE can and should be a significant forum for this molding process. It will be able to assume this role when all members of our profession get involved as authors and readers (hopefully, as both).

The new decade brings a new Editor for the MAGAZINE. During this Editor's term of three years, it is his hope that the MAGAZINE will be a viable vehicle for advancement of the profession. Historically, the MAGAZINE has been the exclusive domain of a cadre of talented agricultural educators. The recent past editor, James P. Key, is very worthy of high commendation for his dedicated service to our profession. The excellence of previous editors certainly presents a challenge for the new Editor!

The editorial policies and mission of the MAGAZINE will remain essentially the same as in the past. However, certain changes in editorial procedure will be made. Each issue will have a Theme Editor, whose responsibility will be to see that the theme is appropriately treated. Non-theme articles will be used as space and article quality will allow. Regular features will include "teaching tips" and "postsecondary" sections. The book reviews will be continued, much as in previous years.

The Editor welcomes suggestions on the MAGAZINE. Our ability to cope with the challenges of the 80's depends upon our leadership and commitment to the profession. With the help of the profession, it is hoped that the MAGAZINE will assume a relevant stance in determining our destiny.

NEW EDITORIAL STAFF

Four new Regional Editors have been named for the AGRICULTURAL EDUCATION MAGAZINE. Their terms are concurrent with that of the Editor, ending December 31, 1982.

The new Regional Editor for the North Atlantic Region is William G. Smith of Rutgers University. Smith is Chairman of the Department of Education in Cook College. He is widely known because of his past leadership in the National Vocational Agriculture Teachers' Association. He has recently served as a consultant to the National FFA Board of Directors.

The new Regional Editor for the Southern Region is Larry Jewell of Mississippi State University. A native of Virginia, Jewell has taught vocational agriculture in Virginia and is currently serving as Coordinator of the Agricultural Education Program at NCSU. He holds degrees from Virginia Polytechnic Institute and State University and the University of Missouri.

Larry Case is the new Regional Editor for the Central Region. Case is currently serving as Director of Agricultural Education for the State of Missouri. He is a former teacher of vocational agriculture and administrator in Missouri. He has been serving as the Director of Agricultural Education for approximately two years.

Rosco Vaughn is the new Regional Editor for the Pacific Region. He is currently State Supervisor for Vocational Agricultural Education in New Mexico. Vaughn is a former teacher of vocational agriculture, and has served in his present position for four years. He has served as an...
THEME

The New Decade: Preparing For The 80's

The past 60 years have been good for agricultural education. Enrollments have grown, programs have expanded, and people have become more and more aware of the importance of education. But what have we done in the future of agricultural education? We have lost the importance of education in agriculture. But where do we go from here? What is going to happen to agricultural education in the 1980's?

No individual can accurately answer such questions, but I think that authors of this issue have done an excellent job in providing us with an insight into the upcoming decade.

Each author has a definite and unique interest in the future of agricultural education. Each has been in his present position for 20 years or less, and each has demonstrated outstanding leadership in a particular area of agricultural education. The authors include a young vocational agriculture teacher who was recently elected as an NYATA national officer, a young student specialist who has served as a national officer in an AIEA, a recently appointed department head of teacher education who just received a term as vice-president of AYA, a relatively new National FFA Executive Secretary, and a brand new Program Specialist in agricultural education.

These have joined together in offering specialized views on the future of agricultural education. I think it is most appropriate that each of these individuals will provide considerable direction to the agricultural education movement in the next ten years.

In addition to projections for the future, each author offers suggestions on what we should be doing to prepare for the upcoming decade. I would only add one suggestion to theirs — as you prepare to enter the 1980's, take time to sit down and map out a few personal plans for your own agricultural education program during the upcoming decade. Look at what you can do in terms of community relations, program planning, or goal attainment, and strive to improve and strengthen your program over this period of time. Keep in mind that one of our major goals for the end of this new decade is to ensure that we have another decade to look forward to. Such a goal will not be possible without effective planning and organization on the part of each individual educator. Your individual contribution will do more toward making the next ten years a successful decade than any contribution by a state or national leader. Keep up the good work, and I hope that you and I are still with us when we begin to prepare for the 1990's.

New Editorial Staff

(Continued from Page 3)

of the National Association of Supervisors of Agricultural Education (NASA).

Special Editors

Three Special Editors have been named to the staff of the Magazine. These are the Book Review Editor, Teaching Tips Editor, and Postsecondary Editor.

The recent Book Review Editor for THE AGRICULTURAL EDUCATION MAGAZINE is Richard M. Milt, a native of Virginia. He taught vocational agriculture for four years in North Carolina before he accepted a position in Idaho. He holds the doctorate from Iowa State University.

Donald M. Claycomb will continue to serve as Special Editor for Postsecondary education. Claycomb is currently a member of the Agricultural Education faculty at the University of Missouri, and was previously at Kansas State University.

The Cover

President James E. Carter is shown speaking to FFA officers during their visit to the White House. On the left is Kelly Grant, past National FFA Secretary, while Mark Sanborn, past National FFA President, is on the right. President Carter is a former FFA officer in the Plains, Georgia, chapter, who often discusses the benefits of the FFA organization.

(Photograph courtesy of the National FFA Center, Alexandria, Virginia.)

THEME

Facing A Decade Of Change

We are now entering a decade in the agricultural education experience that, to say the least, will be very interesting and challenging. The years ahead will be significant in that we will experience the surging up of new priorities, new educational philosophies, publics, and new opportunities. These same years will be a time in which the very purpose of our profession may be challenged by a society that is different from that in which we have grown up. Just as society has changed in the past, some dramatic changes will become prominent enough within the coming decade to cause us to restructure many facets of our profession in order to maintain a delivery system that is meaningful and relevant.

What are the expected factors that will provide this pressure for change? What can the profession do to prepare for this impact and continue to provide services to those who need it and can use our services? These are questions that have no definite answers at this time. Probably, by the end of the decade, we can look back and indicate precisely what should have been done.

However, unfortunately, we cannot wait until 1990 to deal with these questions. We must now attempt to determine what society will be like in 1990 and we must make necessary adjustments in the agricultural education profession that will respond to the needs of society at that time.

The way we face the next few years, and attempt to keep up with the world around us, could very well affect the future of the profession.

Bases For Change

Some of the factors which will bring about change are beginning to surface. There are many which could be related, but seven are listed in this article.

First, there will be a very obvious change in the age groups with whom we will work. Our population is growing older. We will see a basic change in the age ratio. There will be fewer youngsters and more adults, with many more senior citizens. Statistics indicate that in 1978 the median age was 29. This figure should reach or pass 30 by 1981. The projection is that by 1990, we will have, in our population, more people over 55 years of age than we have in the so-called baby boomers.

Second, more women are steadily entering the work force and will need adequate preparation for their chosen pursuits. Women will enter agriculture at an increasing rate.

Third, the pressure to document the need for programs will increase. We will need to justify the existence of programs before funds are made available.

In the past, we were able to say, without much fear of contradiction, that our completers were obtaining employment. We were right. However, we must find a way to tie down the need for the programs during the planning stages in order to gain approval for them. Required evaluation of programs in terms of demand for their products and services is in the market place will surface the need for and quality of the program.

Fourth, changes in the way teachers see their responsibilities and opportunities. We have been operating on the assumption that the teacher is willing to possibly work 18 hours a day while the other teachers in a school are only working 6 - 8 hours and being paid for responsibility or duties performed beyond the regular school day. Some of the research conducted in this area indicates that this is a major cause of teachers leaving the profession for other positions. Each with more information is needed in order to adjust attitudes of the entire profession concerning preparation and retention of teachers who will provide quality instruction at all levels of programs.

Fifth, accurate matching of required competencies, including personal development, with the duties to be performed will have implications for initial preparation for an occupation and for keeping current in employment through programs designed for this purpose. Linking the curriculum to the labor market could mean that employability of completers is better and that the need for the program can be more clearly defined.

Sixth, technology will continue to change. The base for technological development is much broader than a decade ago. We are surely going to see astounding developments within the agricultural complex in the next decade. One can only guess what the parade of agricultural technology will be, but we must be responsive in our program planning to stay ahead of and, if possible, stay ahead of developments.

Seventh, the shift in population can bring pressure for program change. Some areas of the country are experiencing population growth while others are losing. Arizona experienced a 25% increase in five years, while the Northeast had less than the national average growth. Washington, New York and Rhode Island have shown a population decline.

This change not only occurs on a regional basis, there is also local change in population. We are still experiencing
Facing A Decade Of Change

(Continued from Page 5)

movement from the city to the suburbs. In addition, the suburbs are growing larger and there seems to be a growing migration from the cities and suburbs to semi-rural areas near small cities and towns. As these shifts take place, the need for programs will be changed.

Agricultural educators must be aware of and responsive to these and many other changes if we are to survive as a viable element in the educational community.

Preparing For Changes

The second question, "What can the profession do to prepare for this impact and continue to provide services to those who need and can use our services?" must be answered. The time for investigation of the ways and means of answering this challenging question is now. A decade that witnessed unprecedented change and growth cannot afford to be without adequate planning. In 1968, a series of seminars was begun with the first held in St. Louis, Missouri, to help us adjust our approach to what would be a decade of adjustment. These were very helpful in enabling us to appropriately respond to the pressures of the 70's.

We are now getting ready to begin another series of seminars which should make our response to the challenges of the 70's more appropriate than for the past decade. For one thing, it is hoped that more participation will be broader and that many local teachers will be involved.

The first of these will be held August 5-7, 1980, in Kansas City, Missouri.

Projects which are underway and those who would like to participate should make plans now. Discussions during the seminar will include discussion of the role of the vocational agriculture teacher, diversity of programs, a futuristic look at the next decade, philosophy of teachers, identification of competencies, and how changes in agriculture and its related fields will affect the total educational system, alternative approaches to teaching and learning, and needs and employment opportunities, and many other pertinent topics. This discussion will be initiated by interesting and challenging speakers and will be held in round table and small group sessions.

During the two-year period, we should identify the main issues facing agricultural education, strategies for dealing with these issues, and develop ways of implementing these strategies. Programs that have been effective in the past should be encouraged to continue to encourage their efforts to strengthen their programs at all levels and in all areas of responsibility.

We think particularly, over the next decade, regional and national seminars should be held to relate to issues and problems facing in dealing with the pressures for change. In these seminars, there should also be broad participation from various groups, including administrators, teachers, supervisors, teacher educators, representatives of government, business, and industry, and others.

Agricultural educators have always been faced with change. Today, is no different. In fact, one could safely say that we are faced with more important changes than ever before. We must be aware of them and respond in an appropriate manner.

THREE

Agricultural Education

In The 1980's

By J. Robert Warmbrod

Editor's Note: Dr. Warmbrod is Professor and Chairman of the Department of Agricultural Education at The Ohio State University. He has recently completed a term as Vice President of the American Vocational Association.

Foreseeing, even at its best, is approximate. Projections for the future that are most likely to be trustworthy are made by those who have been able to ascertain past and present trends. As we plan for public school education in agriculture for the next decade, we need to remind ourselves that changes in agriculture and its related fields are not static: they are in a state of gradual transition from the late 1970's rather than sudden modifications in policy, programs, or clientele served.

Agricultural Education in the 1970's

As we think about the next decade, let us review some of the developments that have occurred since 1970 in federal- and state-funded vocational agriculture programs in the United States.

From 1970-71 to 1977-78:

- Total enrollment in vocational agriculture increased 9 percent — from 845,100 to 1,000,560 persons enrolled.
- Enrollment in secondary school vocational agriculture programs increased 27 percent — from 562,100 to 735,300. During this eight-year period, total enrollment in public secondary schools increased only 1.4 percent. In 1977-78, 3.8 percent of all students in public secondary schools were enrolled in vocational agriculture.
- In post-secondary vocational agriculture programs, increased 102 percent — from 28,400 to 75,300.
- Enrollment in adult vocational agriculture programs decreased 8 percent — from 254,500 to 233,700.

Themes

- The percentage of the total enrollment in vocational agriculture that is female increased from 39.8 percent in 1970-71 to 47.3 percent in 1977-78. Enrollment was female; in 1977-78, 49 percent of the total enrollment was female.
- Enrollment in vocational agriculture continues to shift toward secondary and post-secondary school programs and away from adult education programs. In 1970-71, 67 percent of the total enrollment in vocational agriculture was high school students; in 1977-78, 71 percent of the total enrollment was high school students. Post-secondary students comprised slightly over 5 percent of total enrollment in 1970-71 and 7.7 percent in 1977-78. The percent of total enrollment that was adults decreased from 30 percent to 23 percent.
- Enrollment in secondary school production agriculture programs remained stable — 339,500 students in 1970-71; 341,400 students in 1977-78. Enrollment in nonfarm specialties increased by 6 percent — from 222,660 to 237,900 students. In 1970-71, 40 percent of all secondary school vocational agriculture students were enrolled in nonfarm programs. In 1977-78, 42 percent of all secondary school vocational agriculture students were enrolled in nonfarm programs.
- The number of high school teachers of agriculture increased 21 percent — from 10,500 to 12,700. The annual potential supply of new teachers who are university graduates certified to teach vocational agriculture increased only slightly — from 1,700 in 1970-71 to 1,740 in 1977-78. The annual actual supply of new teachers (university graduates certified to teach vocational agriculture) increased 22 percent — from 870 to 1,060 in 1977-78. During the eight-year period 65 percent of the annual demand of 95,700 potential teachers who met by 1978, 70 percent of the actual demand of 61,500 potential teachers who entered teaching as their first employment.

This description of trends concerning federal- and state-funded vocational education programs in the 1970's highlighs several points that have direct implications for the 1980's. First, it is evident that agricultural education in the 1970's was affected to a great extent what public school education in agriculture will be in the 1980's. A major factor for which must be considered is the large increase of student enrollment in secondary schools in the future. Second, growth in enrollment during the 1970's has come primarily from two groups — women and adult students. Women make up the farm labor force of agriculture. To what extent are these groups sources for future increase in enrollment? And third, the shortage of university graduates certified to teach who actually enter teaching continues, while at the same time, the number of high school teachers of agriculture increases steadily. Starting from 1970-71 to 1977-78, the demand not met by university graduates who are certified to teach. What are their qualifications for teaching?

Enrollment in the 1980's

If the secondary school vocational agriculture program drives the total federal- and state-funded vocational agriculture program in the United States, then projections for the future must take into consideration what is known about the number of students who will be attending public secondary schools in 1980's. Estimates from the National Center for Educational Statistics indicate that the number of all public secondary school students in 1986-87 will be 18 percent less than the number attending public secondary schools in 1977-78. If all public secondary school students ported for agricultural education in the 1980's Enrollment projections for secondary school programs for all agricultural programs may be correct for three circumstances.

Continued Growth in High School Vocational Agriculture Programs. If enrollment in high school vocational agriculture programs grows to a rate comparable to the 1970-71 period — a 27 percent increase, some 908,000 high school students will be enrolled in vocational agriculture in 1986-87. If that is the case, 5.9 percent of all public secondary school students would be enrolled in vocational agriculture. That high a percentage of all secondary school students enrolled in vocational agriculture has not been achieved at any time during the past 25 years. To achieve this level of enrollment in 1986-87 would mean that 23 percent of all secondary school students would be enrolled for vocational agriculture for each 100 students who were enrolled in vocational agriculture in 1977-78.

Stable Enrollment in High School Vocational Agriculture Programs. If enrollment in high school vocational agriculture programs in the 1980's remains at the level achieved in the late 1970's, 4 percent of all public secondary school students will have to be enrolled in vocational agriculture in 1986-87 compared to 3.8 percent of all high school students who were enrolled in vocational agriculture in 1977-78. This level of enrollment will require that 234 public school secondary school students be enrolled for vocational agriculture for each 100 secondary school students who were actually enrolled in vocational agriculture in 1977-78.

Percentage of Secondary School Students Enrolled in High School Vocational Agriculture Programs. If enrollment in public secondary school students enrolled in vocational agriculture in 1986-87 remains at the level achieved in 1977-78, 3.8 percent, enrollment in high school vocational agriculture in 1986-87 will be some 133,000 students less than enrollment in 1977-78 — an 18 percent decline. The number of students enrolled in vocational agriculture in 1986-87 — 845,300 students — is slightly higher than the actual enrollment in 1970-71. If the students per teacher ratio experienced in the 1970's were to continue, 10,335 high school teachers in 1986-87 — 2,375 less (19 percent) than the number of high school vocational agriculture teachers in 1977-78. If the number of high school teachers were to remain at the number employed in 1977-78 — 12,700 — the student-teacher ratio would increase to 46 to 1 in comparison to a ratio of 56 to 1 in 1977-78.

Concerns for the 1980's

These scenarios bring focus to issues that must be dealt with as we plan for the future in agricultural education. (Continued on Page 8)
Agricultural Education In The 1980's

(Continued from Page 7)

The projection based on the growth rate of the 1970's continuing throughout the 1980's is overly optimistic and, in effect, represents the continuation of enrollment in high school vocational agriculture in the 1980's is realistically some place between the projection for stable enrollment -- some 575,000 students -- and the projection for stable proportions of public secondary school students enrolling in vocational agriculture -- some 582,000 students. In fact it is very likely that there will be some decrease in enrollment in high school vocational agriculture programs in the 1980's. It is possible that a downward trend has already begun since the 1978 enrollment was 5,000 students less than the previous year's enrollment. With that exception, the number of high school students enrolled in vocational agriculture each year since 1963 has exceeded enrollment during the previous year.

I propose that the following concerns warrant our attention and planning for the 1980's.

Nature of Programs. Traditionally policy for public school education in agriculture has been determined by national legislation for vocational education. Consequently, agricultural education in the public schools is, for all practical purposes, federal and state-funded vocational and technical education in agriculture. The prospects are slim that the federal and state legislatures would begin to allocate financial resources for vocational education to develop a basic framework for policy and programs in the 1980's. If that is the case, we face two major tasks. The first is of developing and conducting programs that impact upon the agricultural economy and the second is to extend national legislation. The second task is that of participating constructively in the formulation of new and revised national legislation.

Current national legislation indicates rather clearly that Congress is not interested in vocational education, including vocational agriculture, as having a role in developing the agricultural industry. In that, for example, youth employment, programs for the disabled, and handicapped, and the problems of race and sex equity, are all major sources of policy, to what extent are agricultural education and programs responding to these mandates? How can agricultural education contribute to programs that impact upon our agricultural economy and the agricultural industry? We should be short-sighted to ignore that dimension as we plan for the next decade.

Each concern facing agricultural education impacts on all of us -- teachers, teacher supervisors, and supervisors. Will the prospects for a bright future be best if we cooperatively deal with the challenges we face?

1Data pertaining to federal and state-funded vocational agriculture programs reported by the Division of Vocational and Technical Education, United States Department of Education.

2This concern is discussed in more detail in the author's presentation, "What is the Commitment of Higher Education to Agricultural Education: is the Secondary School Program?" presented at the annual convention and the National Association of State Directors of Soil and Water Conservation.

Source and Competence of Teachers. Data on the supply and demand of teachers of agriculture are a substantial and continuing problem of concern to us. Is there a shortage? In spite of the annual shortages of university graduates certified to teach who actually enter teaching, enrollment continues to increase. How could one take the position that the shortage is more myth than reality, since the teaching positions remain empty? The most important questions are those related to what are the sources and preparation for teaching of high school teachers entering each year to fill positions taken by university graduates who are certified to teach? How competent are these teachers? How can their competence be measured? Are university graduates certified to teach who are competent technically and professionally as they should be?

Evaluation -- Program Quality. Current national legislation mandates both evaluation process and criteria of vocational education. Are these procedures and criteria adequate for vocational agriculture? To what extent are data and information being collected to provide valid and reliable assessments of agricultural education programs? How are evaluative data and information used to improve program quality? Systematic evaluation of both the process and outcomes of agricultural education programs will demand high priority in the 1980's.

The Task Ahead

Those of us in the profession must deal with these issues individually and collectively through out processes of public school education in agriculture is to continue to prosper. The concerns listed will lead to changes that are fairly certain in public education. It is essential, therefore, that we also consider the impact of anticipated changes in the industry of agriculture on the major source of policy, to what extent are agricultural education programs responding to these mandates? How can agricultural education contribute to programs that impact upon our agricultural economy and the agricultural industry? We should be short-sighted to ignore that dimension as we plan for the next decade.

Each concern facing agricultural education impacts on all of us -- teachers, teacher supervisors, and supervisors. Will the prospects for a bright future be best if we cooperatively deal with the challenges we face?
Our Future Depends On Us

(Continued from Page 9)

Probably the most important single ingredient in the past success of the agricultural education program has been outstanding people highly committed to improving young people and to improving agriculture. Our future success will depend to a large extent on our ability as a profession to continue to attract people who are dedicated to their careers, who enjoy the work they do, and who are willing to work toward the common good of American agriculture and American people.

Our challenges today require careful analysis and positive thinking. We are involved in the "people business" and if we can recruit the best of our "business," provide them with challenging and interesting work and opportunities for growth, then our agricultural education program will continue to grow and expand in the coming decade.

1980 Themes For
The Agricultural Education Magazine

Funding the Local Program
Making Yo-Yo Relevant to the Needs of Agricultural Industry
Basic Competency Programs
Experiential Programs
Summer Programs
Technology in Agricultural Education
July

Using Realia in Instruction

Safety Education

Programs in Animal Agriculture

Programs for Exceptional Students

Recruitment

NOTE: Authors should submit two copies of proposed articles. Theme articles should be submitted 21/2 months prior to the date of the theme issue.

February
March
April
May
June
August
September
October
November
December

By Tom Jones

The New Decade
The Same Purpose

Vocational education in agriculture has evolved through six decades since its inception in 1917. Each decade has been characterized by distinct challenges to the traditional teacher. In the beginning, teachers were charged to prepare boys for farming. The 30’s were times of economic depression where survival was the main objective. The war effort occupied the 40’s and vocational agriculture helped meet the nation’s needs for food and trained manpower. The 50’s were a much needed quiet time and vocational agriculture struggled to achieve its potential. During the 60’s, federal legislation broadened the base of vocational education, expanded the clientele, and altered program direction.

At the onset of the 70’s, when I began teaching, futurists in the profession were already projecting what this decade would hold for vocational agricultural education. Ballooning enrollments, targeted social legislation, the "business of agriculture," the nationalization of America, a demand for higher quality and more efficient education, more leisure time, a growing need for competent employees in agriculture, equal rights for all, unemployment, and inflation have each had a tremendous impact on our programs and our teachers.

Throughout all of this, vocational agriculture has survived and today, just as in 1917, the basic purpose of our programs continues to be specialized training for employment in agriculture. Whether the program is in the city or countryside, large or small, in rural or urban, in the years ahead, agricultural mechanics, renewable resources, sales and service, horticulture, the common thread of specialized training for agricultural occupations is the enduring principle of our programs and our teachers. The 70’s, perhaps more than any other decade, have seen the coming and passing of many "fads" and "new initiatives" in education. Two of the grand fadologies in vocational education have been that (1) anything new is better, and (2) quantity equals quality. Vocational agriculture has participated, to some extent, in the perpetuation of these two fadologies. However, the programs which have survived are those of high quality, conducted according to program standards of excellence, which meet the needs of their students and communities by training people for work in agriculture. The new decade, I believe, will not end much differently.

A local teacher’s ability to conduct quality programs will be affected by some of the same forces as past decades have seen. In addition, issues which are unique may also appear. What will affect the nature, longevity, and quality of vocational agriculture programs during the next ten years might be contained in the following four factors which, as teachers, should ask ourselves: (1) Who will we serve, (2) How will we serve, (3) How well will we serve, and (4) How will we know we are serving the best interests of our students?

Who Will We Serve?

Simply stated, our programs will serve the agricultural industry and those who need training for employment in agriculture. If we fail to do that, we will cease to be needed. I am not sure that these goals per se are new, but the new emphasis on the local vocational agriculture program as a source of qualified employees, vocational agriculture to many people means "AG," and the recognition of leadership skills developed through the FFA organization are essential parts of employability. However, vocational agriculture has been a viable educational program, we must do more than ride the laurels of a vocational youth organization.

In order to provide training employees for agriculture we must keep informed of industry needs. Neither business nor our students will benefit from training in non-valid or non-economic occupations. Let us strive in the 80’s to strengthen cooperative relationships with employers in agriculture by establishing our credibility as a training program capable of providing skilled, knowledgeable, and responsible employees.

Let us also strive to recindle in our students the desire and ability to become entrepreneurs. We cannot eliminate the goal of establishment from employment. Somewhere in this decade, we have limited the future of many of our students to gainful employment. Yes, it is hard to become established in business today, especially farming, but it is not impossible. Training for ownership encompasses the same competences as training for employment with increased emphasis on business management knowledge and skills.

Teachers will continue to be challenged to keep abreast of technical changes in agriculture. It is likely that our students will be different and fewer in number. According to research by the National Education Association, annual declines in school enrollments in the years until 1985 will be expected to drop each year until 1985 and then are expected to begin a period of small increases each year until the year 2000. Fewer secondary students will result in the need for our programs to provide training for adults. Young farmer education will gain in both popularity and availability. We may find ourselves competing with other schools for the training needs of employees as determined by their employers and we will need to improve our recruitment practices. Career exploration at the junior high school level will take on increased significance as this emphasis will be placed on career preparation in our high schools.

How Will We Serve?

Effective teachers in the 80’s will be those who can plan and execute effective programs. Initiatives and the "proposition 13 mentality" will require us to eliminate the "chaff" from education. I wouldn’t speculate on what we might cut but emphasize on what we keep. I do know what we must cling to as the basic ingredient of the program—specialized training for employment in agriculture. This could be the thought that students learn best when they experience first hand what it is like to work in their chosen occupation through supervised occupational experiences.

The ability of teachers to continue providing sound occupational experiences to students will be tested in the decade ahead. In the past, programs ran the risk of being absorbed into the mainstream of general education. As more of our students come to us from non-farm backgrounds, the need for programs which are meaningful in the larger business or recognizing the leadership skills developed through the FFA organization are of central importance to employability. However, vocational agriculture has been a viable educational program, we must do more than ride the laurels of a vocational youth organization.

How Will We Know We Are Serving the Best Interests of Our Students?

In order to provide training employees for agriculture we must keep informed of industry needs. Neither business nor our students will benefit from training in non-valid or non-economic occupations. Let us strive in the 80’s to strengthen cooperative relationships with employers in agriculture by establishing our credibility as a training program capable of providing skilled, knowledgeable, and responsible employees.

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How Will We Be Led?

Leadership in the 80’s is at the local, state, and national levels. In the 80’s, there will be a need for leaders at all levels. We need good teachers in the classroom but we also need good vocational educators in positions of program leadership, ranging from local directors, to state staffs, teacher education, and professional organizations. As federal legislation becomes directed more to short-term funding, and seems to look to state and local legislatures for support in developing and improving existing programs, no one is in a better position to determine the shifts which will take place in the years ahead than the local vocational agriculture teacher. This is an opportunity and a responsibility we must willingly assume.
A NEW DECADE

A new decade is here! New challenges and increasing awareness of the importance of a solid agricultural base and the wise allocation of valuable natural resources have arrived with it.

All agricultural educators are aware of the importance of agriculture and the management of America's natural resources, but we are not adequately relating that to the cultivating of America's finest resources, our youth!

Difficult Decisions Ahead

Difficult decisions await those fresh young faces that surround vocational agriculture classroom tables. We must continue critical curriculum modifications with program evaluation and leadership activities that assure a well-rounded student outlook, geared to proper evaluation of a burgeoning amount of information that becomes more global in its causes and effects each day.

Byron Rawls, National FFA Advisor, thinks that through the operations of a complete vocational agriculture program, including a strong student organization component, we have the vehicle which will help ensure the strength of America's agriculture in the '80's and beyond.

President Carter, speaking to the State Presidents during their Washington Conference this past July, challenged FFA members to develop their leadership potential and work to build the confidence needed in America. Through leadership development activities, including the important skill development events, such as parliamentary procedure, public speaking, and serving as an officer, we will continue to help build confidence in young people who will be skilled as well as confident leaders in the '80's and beyond.

What Members of the FFA Staff Think

Leadership programs in the '80's will continue to challenge FFA members to put forth their best efforts. We will search for avenues to serve all students with this important part of the program. State and national leadership experiences will continue to expand, but the real input of leadership training will still be carried out at the local level, says Tom Dinsmore, Program Specialist - Leadership, at the National FFA Center.

The success of the students who participate in FFA depends on the presence of effective leadership through the program. Supervised occupational experiences (SOE) programs, FFA activities and national leadership will continue to be relevant in the '80's.

More realistic and meaningful ways need to be developed to provide all students, regardless of where they live or the type of agricultural program they are pursuing, with appropriate SOE programs. If this is done, FFA advisors will need to set goals and objectives that give our program direction and meaning.

I want there to be a desire on the part of agricultural educators to relate the skill contests more closely to the instructional program. As agriculture becomes more complex, competition will serve as an incentive for members to learn. At the national level, I think on the local level that the FFA Alumni will provide a just stronger voice in the area of governmental affairs. We'll also provide direct support to FFA members anywhere and whenever possible.

The Supply Service will continue to supply the FFA member, chapter, and/or local state associations with official merchandise and competitive prices. This year we were forced to raise the price of the important blue jacket by $1.00 and in inflationary times these things must happen. We will continue to make the sale of the less necessary items pick up some of the tab so the more integral items can stay at a lower cost. We are aiming and operated by FFA, to serve the FFA, says Dr. Andrews, FFA Supply Service Manager. The world agriculture situation will become a breakfast table discussion and will continue throughout the year.

WeA (Work Experience Abroad) has proved to be quite effective as an international experience for FFA members. Other programs, such as the cooperative effort with AID (Agency of International Development) in setting up a viable FEFP program in Panama will likely see FFA become even more of a worldwide concept, says Lennie Ganneau, Manager of International Programs of the National FFA Center.

Overall, the '80's will be a most exciting time to be alive. As we plan programs, publish materials and operate programs, it is important that all agricultural educators cooperate to best serve the individual student.

Challenge in the '80's

A big challenge facing the next decade will be that of meeting the needs of a great diversity in agriculture and providing a national system that takes into consideration a diversity of regions and states. Increased interest will be needed to gather information from the field, evaluate it, and come up with programs that work for the vast majority. This will take time and patience, but educators, students, teacher educators, and state staff as well as people in agricultural industry in the decision-making process.

This year, the National FFA organization was successful in gaining the inputs of a large number of implementors of vo-ag/FFA activities into the planning.

The philosophy of FFA activities for every student and chapter, but not all activities for every student or chapter, will become increasingly important as teachers manage large, diverse programs.

Increasing FFA membership in each chapter will also be high priority this year. As an organization, the National FFA has adopted a new mission statement, "The National FFA will have to do a better job of targeting in on the technical information needed to serve a readership that becomes more diverse and more aware. Hopefully, we will continue to emphasize the human values and relationships in instruction and in the magazine.

The excellent local level publicity for vo-ag/FFA efforts

THE AGRICULTURAL EDUCATION MAGAZINE

January 1980
Make Evaluation Part Of Your Instructional Program

Evaluation of student achievement is an important part of instruction. At the secondary level, as much as 20 to 25 percent of classroom time is devoted to evaluation, although, at times, this area seems to receive the least emphasis in the instruction program. Unfortunately, a large portion of classroom teachers treat evaluation as only a necessary duty designed to "grade" their students and bring their courses to an orderly close.

Evaluation is and should be more than just a terminal assessment of a student's achievement. When used to its fullest potential, student evaluation techniques can become the guiding force in the classroom, showing students the appropriate paths to follow in accomplishing the course objectives and program's goals in an interesting and meaningful manner. Some specific aspects of evaluation are discussed in this article.

Proper evaluation techniques can serve as guidelines for students, allowing them to recognize the points or objectives the instructor feels is important in the course. On the other hand, teachers should be concerned with providing evaluation of those goals and objectives which are of most importance rather than wasting valuable class time and student time on evaluation of insignificant or meaningless items.

Use A Variety of Evaluation Strategies

Student evaluation must be a continuing part of the teaching itself, rather than just limiting such activities to times of student stress or just a few days before final exams are administered. Numerous evaluation techniques and activities throughout the school year enable students to demonstrate their true abilities and understanding. If variety is indeed the spice of life, using a variety of evaluation procedures can and will spice up your instructional program.

All evaluation techniques have strengths and weaknesses. Therefore, the best evaluation systems make use of appropriate techniques, as well as at a time when a specific technique is most appropriate. Direct observation, objective tests, self-assessment, demonstration and reports are only a few methods that can be used to evaluate students.

Evaluation (pre-tests) can be used as diagnostic tools to identify areas of weaknesses students may possess upon entry into a specific area. Teaching methods and instructional materials may then be altered or included to meet the needs and interests of students.

An effective evaluation program should have a motivational influence on students. Creative evaluation techniques lead to creative performance on the part of the students. Different types of routine evaluations will prompt the same type of activity from pupils. Evaluation techniques and should not be used as mere morale builders. Well conducted evaluation allows students to feel a sense of achievement and enhances their self-confidence. It is the responsibility of the teacher to be sure evaluation has a positive effect on student morale and guard against actions that might have a disruptive effect on morale.

The maintenance of public relations for a particular school program can be affected by how teachers evaluate their pupils. Every evaluation program in school should be fair to all students and honest; have adequate reporting procedures to administrators and parents; be consistent from semester to semester and be in language that is easily understandable to students, parents, and other school personnel.

Self-evaluations by the student, the class, and the teacher are all important in a comprehensive evaluation plan. Students need such activity to periodically update their own personal inventory of attitudes and abilities in order to set, revise, and/or accomplish goals. Teachers need self-evaluation for continued program revision as well as personal improvement in teaching techniques.

By Rice Foster, Editor's Note: Dr. Foster is Special Editor, Teaching Tips and author of this article, currently Assistant Professor in Department of Agricultural Education at University of Idaho.

When Evaluation Is Of No Use

Evaluation which does not lead to some kind of action is of no use. Improvement of instruction and learning should be the primary goal of evaluation. Through a comprehensive student evaluation program, an instructor can identify areas where the program standard can be improved and the needs and interests of students more effectively met.

As educators, we cannot afford to neglect any part of the instructional program, especially one as important as student evaluation. Several "do's" and don'ts of student evaluation, administering, and scoring tests are listed below.

When Do's and Don'ts of Student Evaluation

Test Preparation

Do:
1. Be sure tests are neat, attractive and logically arranged.
2. Be grammatically correct.
3. Make tests easy to score.
4. Place a title on test papers.
5. Provide answer sheets or scoring rubrics.
6. Provide written directions in a precise and clear manner.
7. Evaluate only important areas of concern.
8. Provide guidelines for time allocations when appropriate.
9. Use terminology that encourages rather than confuses the student.
10. Give extra trials at the beginning of the test.

Don't:
1. Leave test materials or keys on your desk, in unlocked drawers, or open cabinet shelves prior to testing.
2. Allow students to take a test under adverse physical conditions.
3. Allow unnecessary traffic or distraction during evaluation.
4. Administer tests without at least three days prior warning and explanation of testing procedures.
5. Use test time to read magazines or remain seated at your desk.
6. Permit students to direct questions to you from across the room or bring questions to your desk.
7. Give information that indicates the answer to any question or problem.
8. Allow students to collect papers or bring them to your desk individually.

Test Scoring

Do:
1. Score each test directly from a pre-made key.
2. Be fair, honest and objective.
3. Be open and understanding of students' interpretation of test items.
4. Prepare an item analysis on items of questionable accuracy.
5. Allow students to correct test items that employ alternate response, multiple choice or matching when appropriate.
6. Correct essay questions, completion and recall questions yourself.
7. Avoid multiple questions all at one time.
8. Allow students to re-check their tests.
9. Return tests as soon as possible after examination.
10. Use a review of the test as a learning technique.
11. Use a clear and understandable method of grading.
12. Make encouraging comments on students' test papers.
13. Be conscious of personal fatigue while grading.
14. Be conscious of student attitudes and stress situations evident during testing that may affect individual student performance.
15. Keep an accurate record of examination scores.
16. Report scores to administrators and parents in a clear, concise and objective manner.
17. Follow-up test grading with a student-teacher conference when appropriate.

Don't:
1. Allow personal reactions to students to interfere with grade determination.
2. Criticize student performance in front of the class.
3. Grading papers in a subjective manner - relying on personal recall for appropriate answers.
4. Rely on scores obtained by student-corrected tests to be accurate.

TH AGRICULTURAL EDUCATION MAGAZINE

JANUARY, 1980
How The Minnesota Farm Business Analysis Program Works

Adult education in agriculture is active and viable in Minnesota. As one of the 22 states participating in education programs in the United States, the Minnesota program has served as a model for similar programs in other states. Ideally, a program of instruction for adult farmers will include three major areas: 1) farm business management, 2) mechanized agriculture, and 3) enterprise instruction. The farm business management area forms the basic foundation for all adult farm education instruction. It includes specific courses comprised of definite units that are taught in an organized sequence, complemented with individual-on-farm instruction. Farm business analysis is a part of the farm business management area.

Another part of the farm business management area is the farm family’s farm and home record. The beginning instructional units in farm business management will depend on the importance of a complete and accurate farm and home record. Nothing is left out of this record. All money spent is accounted for, including personal service costs, capital, production data from crops and livestock, and a thorough look at insurance claims. Each farm family will want this as a way for the computerized analysis of this record to be accurate, meaningful, and useful.

In 1979, 4,550 Minnesota farm families received a computerized farm record analysis while participating in a farm business management course at this point three questions come to mind. Why did all these farm families get a detailed business analysis? What can the analysis do for them? How did we get to use this analysis? The answers to these questions are many and varied. They will depend largely on the farmer, the type of farm operation, and the stage of development of the farm operation. The easiest way to explain what the analysis is and why it is important to farmers is to look at some of the more important sections of the analysis.

Analysis Information

The typical farm business analysis program will contain 15 to 20, or more, tables in a computer printout, with the total number depending on the type of farm operation. The larger the number of enterprises the farmer has, the more tables will be prepared. While the information given is interrelated, it can be divided into four categories: 1) the whole farm financial and management information, 2) the operator’s share only, 3) individual crop enterprise, and 4) livestock enterprise analysis. The concept of whole farm versus operator’s share only is introduced to provide additional information to those farmers who do not own their entire operation. Many own a smaller farm and lease additional farmland or livestock and machinery. Some operate totally in partnership with another owner. It is a definite advantage for farmers to be able to view the financial and production aspects of their operation (whole farm) and then to be able to break it down and compare their own financial position with information on the profitability and feasibility of future operations, or partnership opportunities are provided.

The first part of the farm business analysis is concerned with the value and size of the farm business. It examines the cost of both crops and livestock and allows a farmer operator at the balance of his work load between his enterprises a valuable view of the labor efficiency and costs.

An enterprise statement is included with the analysis, and serves several purposes. It provides the farmer a look at the farm’s operating results plus the value of inventory increases or decreases on each livestock enterprise. Return over feed cost is shown and can be compared to a similar return at a future time. Farm families can use the change in the on-farm return to staple crops to show the relative importance of each to the farm family's income, give an immediate look at the accuracy of the record.

Efficiency Information

Specific feed back is given to various measures of farm organization and efficiency. Some of the more important ones include:

1. Labor earnings — A measure of the value of financial return for labor. The value of labor is calculated by subtracting the total labor costs from the total gross income and dividing by the total labor hours.

2. Crop profit yield — A measure of the crop yield per pound of all crops produced is expressed as a percentage of income.

3. Percent of tillable cropland in potentially high return crops — A measure of the organization of the crop program.

4. Gross return per acre — The single measure of how well the crops contribute to the farm income.

5. Return per $100 worth of feed fed to productive livestock — Measures the general level of efficiency for all livestock.

6. Total work units — A measure of the labor requirements and an indication of the total work load.

7. Work units per worker — A measure of labor efficiency.

8. Power, machinery, equipment and building expenses per work unit — A measure of expense control.

9. Farm capital investments per worker — An indication of an individual’s relative use of labor and capital.

Livestock analysis, likewise, provides information on the costs, returns, and productive efficiency of the enterprises. A farmer can then determine which of the several management options are being used in the livestock operation. Typically, analyses are available for 32 different types of livestock enterprises.

Instructors working with farmers using the record analysis view farm business management as a "goal-oriented" program. Farmers are encouraged to set forth goals for themselves and for their farm operations. The process of goal setting and year-end analysis becomes a "benchmark" from which a farm family can measure progress achieved toward a pre-determined farm plan or family goal.

A Decision-Making Tool

The computerized analysis has also become a "tool" for the farm operator to use in the decision-making process. The farm family can readily study its current financial status and productive capabilities. Armed with this information, and enabling the assistance of the adult agricultural instructor, they will be re-organized and plan the course of the farm operation. The analyses of succeeding years will show the progress made as a result of the planned re-organization. When these results are studied it is quite likely that additional goals or management policies will be desirable. These may be the result of evaluating, as family resources change, as family goals change, and as changes in economics become necessary to vary the plans. The process can repeat itself many times over the lifet ime of a family farm operation.

The Minnesota Farm Business Analysis Program is based on the computer printout, which is programmed to the current standard, computerized record keeping system. This development has progressed, largely, because of the efforts and leadership of Edgar Parsons, a Professor of Agricultural Education at the University of Minnesota. The electronic record-keeping system is used by Specialized Data Systems located in Madison, Wisconsin. Recently, an advanced monthly-mail-in record program has been developed that will provide a monthly analysis very similar to the computerized record. This new program will automatically close with the current annual analysis at year’s end record. This one will enhance the record keeping system, but also an advanced “educational tool” for the modern farmer-businessman.

This, the Fourth edition, accomplishes a needed updating of the 1973 version. This work is based on the 1974 census of agriculture and 1976 USDA charts and graphs. Users of the previous editions will be pleased to know that the content is similar to the previous text.

Dr. Krebs’ experience as a teacher of the school of Agriculture Organization of the text’s content and his choice of relevant chapter topics. With a farm management program at the university, and the related peer review (academic). "Agriculture in Our Lives" provides an introduction to the rural areas of agriculture. The book’s chapters cover general areas such as "Agricultural Occupation and Life in Rural America" as well as Technical Agriculture topics including "Dreams of Farm Crops" and "Feeding Livestock." The content of each chapter is presented in question and answer format. A list of suggested learning activities is included at the end of each chapter. The reading level is appropriate for both junior high and upper high school students. This characteristics support the accomplishment of the book’s stated purposes which is to serve as a basic text for an introduction to agriculture course and 2) as a general reference for vocational agriculture courses.

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Counseling The Counselors

Many factors affect the degree of success that can be achieved by a given vocational agriculture program. One of the most important of these factors is the level of communication and cooperation between the vocational agriculture teacher and other school personnel. It is generally accepted that one individual who is critically important to the success of any such program is the high school counselor. Counselors have traditionally been criticized by teachers for a myriad of evils: poor students, overcrowded classes, bad attitudes, and general lack of program support. Communication for such criticism varies from school to school, but the fact remains that counselors, because of the many important members of the high school faculty, and teachers must seek ways to improve communications with them. In particular, the vocational agriculture teacher should make an effort to create an atmosphere of "counseling the counselor" in relation to his/her program. The purpose of this article is to present a few tested and proven strategies that you can use for improving communications with the counseling staff.

The PCPPR Strategy

The first strategy might best be described as the PCPPR (Public Communication Produces Positive Results) strategy. Simply stated, this strategy implies that positive outcomes are desired in terms of the counselor's relationship to the vocational agriculture program. Most people, counselors included, realize the importance of communications, and when those actions are taken with an open communications strategy, a teacher can expect positive outcomes.

The positive communications strategy usually takes several forms: however, it must start with an opening of the channels of communication and the teacher of the agriculture subject should take the initiative. A letter of introduction is a good beginning and it can be followed up by a phone call to communicate with the counselor on a one-to-one basis. Initial items of the discussion might include a review of the goals and general objectives of the vocational agriculture program, a discussion of the FFA as an inter-curricular activity, the many opportunities, and involvement, of course offerings, a description of the supervised practice program, that is the vocational agriculture program itself, and further information about the young farmer and adult education through the FFA.

This communication effort is not only important, it may be critical in developing a positive relationship with the guidance personnel. It is natural to assume that everyone on the school faculty, particularly the counselor, is familiar with the vocational agriculture program; however, this may not be valid, and is certainly not a safe assumption. School counselors are generally very busy people with myriad responsibilities and concerns. Although becoming familiar with all the school offerings is an inherent responsibility of the counselor, realistically, in order to develop an adequate time or energy to develop that familiarity and to remain up-to-date on all the school programs. Thus, it is up to the teacher to take the initiative and help the counselor become more informed about the vocational agriculture program. Of equal importance, the counselor must remember to maintain an open line of positive communication with the counselor, on a one-to-one basis.

Intra-School Public Relations

The second strategy is to develop an aggressive intra-school public relations program. Vocational agriculture students and the agriculture teacher are continually bombarded with the necessity for a strong public relations effort for the agriculture program and FFA chapter. Less emphasis has been placed on public relations efforts within the school and aimed at the student body, faculty, and administration. If the agriculture teacher or students prepare a layperson or some sort of display, it might well be placed in a busy traffic area where it can be seen by larger numbers of students and faculty members. If the guidance office has a bulletin board, ask the counselor for permission to display items pertaining to the vocational agriculture program or the FFA chapter. If appropriate, announcements, including such items as school sports events, they should also include the counselor. Make an extra effort to get published and articles in the school newspaper, or not just the community newspaper.

Counselor Involvement

A third strategy in "counseling counselors" is to get them involved in the operation of the agriculture program. There are many things that the teacher does as part of the vocational agriculture program that can involve counselors. For example, it can easily be arranged for the agriculture program to host an outstanding student award. It would follow that a counselor could be included in the selection of the outstanding student and that the counselor could apply to scholarship and leadership award winners. Also, the agriculture instructor may take field trips to make visits during the year. It would be very easy to include the counselor as one of the visitors. This out-of-school situation would provide a good opportunity to communicate with the counselor outside the school setting. The chance for the counselor to interact and become more familiar with students and important projects in the program.

This type of involvement helps develop the counselor's awareness of the program and encourages personal and professional cooperation committed to the program.

Counselors in Follow-Up

A fourth strategy would be to involve the counselor in developing your program. The former vocational agriculture students, Follow-up programs are developing agriculture classrooms and counseling the counselors. Several strategies for accomplishing this counseling include:

(1) developing a positive communication effort;
(2) developing an aggressive intra-school public relations;
(3) involving the counselor in program activities, and
(4) giving the counselor assistance and advice in counseling student follow-up.

There are two key points in this whole process. First, assume the counselor will be interested in the success of the vocational agriculture program, if provided with an adequate knowledge of the FFA. Second, assume that it is up to the teacher of vocational agriculture - to provide the information and opportunities for involvement that counselors need to do that knowledge base.

Remember, the opportunity is there in years to come, your success, and that of your program, will depend on the plans you make to meet the challenge.

Women in Agriculture: The New Growth In Programs

By O.E. THOMPSON and L.Z. McCANDRELL

Editors Note: Dr. Thomson is Professor of Agri- cultural Behavioral Sciences and Mr. McCandrell is a Research Associate at the University of California, Davis.

California, new women students were twice that of new men students. In part, the increasing enrollments of females in agriculture is an outgrowth of the 1968 Supreme Court ruling which wiped out many of the injustices in the FFA organization. Admission of females into this previously male-only organization precipitated an influx of females in the secondary years. This started a "snowball effect" throughout the educational system which is now evident at the graduate level of agricultural programs. This may be among the most dramatic impacts which any mandate for program integration has had upon an educational system.

Ag Programs Have Grown Faster

Agricultural programs are growing faster than educational institutions as a whole. This growth has been evident since the 1968 Supreme Court ruling which wiped out many of the injustices in the FFA organization. Admission of females into this previously male-only organization precipitated an influx of females in the secondary levels. This started a "snowball effect" throughout the educational system which is now evident at the graduate level of agricultural programs. This may be among the most dramatic impacts which any mandate for program integration has had upon an educational system.

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- Animal science and ornamental horticulture have been fields with growing opportunities for women, but now agricultural economics, resource sciences, and business aspects of agriculture are emerging areas of female enrollment.

- The influx of trained females into the traditionally male agricultural labor market has many implications for employers in agricultural businesses, in farming operations, and in agricultural education.

- During the past five years, the rapid increase of female enrollments in agriculture has changed the proportion of women from about one-fifth to one-third of all agricultural students. This change has not been more significant for women than men. At every level of education the women are increasing and there is a margin of less than 200 enrollments. In California, the number of new women students is twice as large as the number of new men students. At the state colleges new women students make up 225 enrollments. At the undergraduate and graduate levels the University of California, Davis, received a few percent of the FFA members. The national average is 2 to 3 percent. The new students are generally under 20 years of age and many have no farming background. They are attracted to agriculture and particularly to animal sciences.
Women in Agriculture: The Narrow Growth in Programs

(Continued from Page 19)

whole. At all institutional levels, the average increase for the total of males and females in agriculture exceeded the overall rate of growth in the institution, and the average increase in female agriculture enrollment exceeded that of males. In the secondary schools, the average yearly increase of females exceeded, nearly 38% annually, whereas male enrollments increased less than 10% annually. In the state college system, the same trend existed — female enrollments were increasing nearly four times as fast as male enrollments, 44% and 9%, respectively.

The configuration of programs is, of course, also changing. Traditionally, majors that are ornamental, horticulture, production agriculture, and animal sciences are popular for females in institutions of all levels. This is still true, and female enrollments in these majors are growing. Yet, emerging areas of interest are also being increased. Areas of interest in agricultural education and the business side of agriculture is observed.

A snap-shot look at program enrollments for one year, 1977, shows that the level of enrollment in the secondary level, female enrollments in production agriculture surpassed these of ornamental horticulture. At the community college level, women enrolled the largest in ornamental horticulture, with agriculture and science and agricultural production having the second largest number following by agricultural economics and resource science. However, at the 4-year college levels, particularly strong enrollment patterns are seen in agricultural economics and the sciences.

Impact on Education and Employers

The implications of the changing sex composition in agriculture will and, to a certain extent, has affected two groups of people — educators and employers. Educators are in the operation of a farm/ranch or an agricultural business has been traditionally performed by males, with female farmers comprising one-third of those studying agriculture in California schools, this will be changing.

For the first time, qualified women will be available for almost any type of vocational agriculture job. Teachers of vocational agriculture must be prepared to assist in this transition. Since they are involved in the preparation of females as agriculturalists, they must assist in helping them to become prepared for the many positions that are available in this traditionally male-dominated environment.

During the transition period, females must be conditioned to deal with the inevitable discrimination, obvious, subtle, intentional or accidental. Concretely, agricultural teachers must make an effort to stimulate female students into their labor force, including helping employers to identify obvious as well as unintentional forms of discrimination inherent in any changes as dramatic as this will be. Brochures, presentations, and other means should be used to assist employers in recognizing their biases.

Teachers of vocational agriculture have obviously been very successful in converting females to enroll in vocational and cultural programs. Have teachers equally successfully in helping play a substantial role in fel- ducational efforts might have on voca- torial agriculture? The possibility exists that most of these efforts have been so-called "participatory." For example, she has been reported to have been involved in the teaching of vocational agriculture in the United States since 1978. He also reports that about 3,000 of these programs, or 60% of the positions filled by new teachers were created by students leaving the profession. Thus, a teacher's job is created new or additional positions.

On the supply side of the ledger, teacher education programs in agricultural education view, agriculture as "only work" practice. This was suggested that teachers must work with, or employ employers to help them to "only work" practice. This was suggested that teachers must work with, or employ employers to help them to protect female students. Far too many farm operators and business managers still view agriculture as "only work" practice.

Is There Really a Teacher Shortage?

"The most pressing problem in our state is the shortage of teachers.

"What can we state staff in voca- tional agriculture do about the short- age? Here are some things that many others are common these days: schools scramble to find vocational agriculture teachers. These are on average 3-10 teachers in their teaching staffs. This so-called shortage of agriculture teachers is not an isolated concern, but rather one that reaches from coast to coast affecting nearly every state in the union. Like other "shortage" phenomena that is here today and gone tomorrow, we have experienced a shortage of teachers in vocational agriculture for years."

What Research Has Shown

Attempts to overcome the con- tinued shortage of a lack of qualified teachers have been many faceted. Research efforts have been in an attempt to determine the exact nature of the factors that influence a person to become a teacher. (2) the reason why a teacher leaves the profession. (3) the benefits

and rewards of teaching, and (4) the future need for teachers in particular programs. Various and annual award recognition programs have been developed and employed to encourage teachers and others to enter and stay in the profession. The professional Emergency training program, involving par- iticipants lacking the professional knowledge of the teacher has been developed by teacher education programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education. Teacher certification requirements have been reduced or eliminated, in some cases, essentially eliminating the need for a bachelor's degree to teach programs and state departments of education.

By PHILLIP R. ZUSBRICK

REFERENCES

The Challenge Of Establishing A School Farm

"Learning by doing" situations in many of the skill areas in production agriculture are relatively easy to find. Feeding, breeding, fertilizing, and harvesting experiences are plentiful on many home farm placement sites. One important area not so readily available in vo-ag programs is real decision-making.

The vocational director at Addison County Vocational Center in Middlebury, Vermont, visualized a decision and operation practice farm. It was to be financed with a revolving fund, similar to those used to buy land and materials for building trade students a house construction project which was eventually sold. The farm idea became a reality at Addison County Vocational Center in October, 1978, when the local school board approved the concept and undertook a $40,000 budget to stock and equip a 190-acre farm rented from Middlebury College.

The Farm Production and Management class in vocational agriculture was given the management of the farm. The twenty juniors and seniors were organized into individual decision units that could be translated into small group action. They purchased a herd of 43 Holstein cows with an extra $5,000 loaned by the local FFA Chapter. This allowed the class to secure better quality animals and the original $24,000 budget permitted. Other major decisions were made after thorough study on $16,000 worth of used equipment, a milk market, a feed supplier, and on the hiring of a resident operator. A state exemplary program grant allowed the operator, a former artificial breeder, to be hired by the Center to give needed instructional services on the farm.

Student managers make farm improvements, handle the milk checks, write the checks to pay bills, plan cropping and feeding programs, do chores on the operator's days off and vacations, and work individually with the farm operator to keep up-to-date. Knowing what is happening, students have a better basis for better decision-making.

Culled cows have been replaced with several colored breeds of cattle as a basis for comparisons. A dairy-beef project has been started with half calves. The herd average increased from 14,720 to 18,700 pounds per cow. Over 7,000 bales of hay and some tons for corn silage are grown for winter feeding. The agricultural mechanics classes have repaired much of the equipment, while the vocational horticulture classes have planted and cared for flowerbeds, shrubs, and a large vegetable garden.

The summer program gave one manager-trainee with very little farm experience the opportunity to learn enough so that he plans to launch a similar farm operation on his own when he graduates next spring. Another young student has been hired by the managers for chores, while another manager-trainee has assumed new responsibilities this fall.

The opportunity for students to solve realistic farm operation and management problems with all the details has been effectively created by this project. The conditions of a convenient rental farm, a concrete school building, and enthusiastic student managers and committed leadership are not in itself to find in other settings.

The objective is not to produce the State Star Farmer, but more important an upgrading of the level of ability of many students who otherwise have not had these kinds of experiences. The outlook is to move more farm workers and managers into positions on their own or area farms.

BOOK REVIEW


The most recent innovations in dairy science are combined with traditional methods to give a clear representation of modern dairy practice. The production and marketing of both milk and dairy cattle are covered in sufficient detail to not only allow for a novice to understand dairying but also to give the dairy herd manager a ready reference for specific problems.

The chapters on nutrition, breeding, milk production and collection, and health have been enhanced upon. Each chapter contains a list of references at the end as further sources of information.

Both authors are affiliated with Virginia Polytechnic Institute & State University. Paul Reaves is Professor Emeritus of Dairy Science who has many awards and honors and who are the First Faculty Achievement Award at VPI's College of Agriculture, and the American Dairy Science Association Award for Dairy Production. Dr. William M. Egen is a Professor Emeritus of Science at VPI & SU. He has received the Will and Ganna Sigma Delta awards for teaching excellence.

BY JOHN F. ADAMS

Future Farmers of America Membership by States

June 1979

<table>
<thead>
<tr>
<th>State Association</th>
<th>FFA Membership</th>
<th>Number of Chapters</th>
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<tr>
<td>State Association</td>
<td>Nevada</td>
<td>632</td>
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<tr>
<td></td>
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Decreases in membership were fairly widespread among the states, and tended to be small. California had the largest decrease, with a drop of slightly over 2,000 members. Several states reflected gains in membership over the previous year. Those with the largest gains included Arkansas, Kansas, Louisiana, New York, North Dakota, and West Virginia.

By Stephen Rouh

*Affiliated Chapter
 Stories In Pictures: The New Decade

THE NEW DECADE will see changes occur in vocational agriculture/agribusiness. These changes will involve increased demand for technical competence, more female enrollment, and new approaches to adult education. The photographs in “Stories in Pictures” illustrate some of the anticipated changes.

Photograph Descriptions:

1. Agribusiness will require employees who are competent in many aspects of day-to-day business operation. Vocation programs will need to adjust their curricula accordingly. (Photo courtesy National FFA Center)

2. Equal opportunity for everyone will continue to be an issue in the 80’s. Many people will be entering non-traditional roles. Females have all ready proven their abilities vocational agriculture/agribusiness and the FFA. (Photo courtesy National FFA Center)

3. Food production will be more important than ever in the 80’s. Will there be enough food? Who will produce it? Certainly vocational agriculture/agribusiness and the FFA will assume important roles. (Photo courtesy National FFA Center)

4. Adults will need to be taught new skills. What delivery system will be developed to meet changing educational demands? Reese Iber,Vo-Ag instructor at West Jones High School, Laurel, Mississippi, demonstrates the pruning of young muscadine grapes. The production of this grape is an emerging agricultural commodity for the new wine industry of the South. (Photo by Jasper S. Lee, Editor)