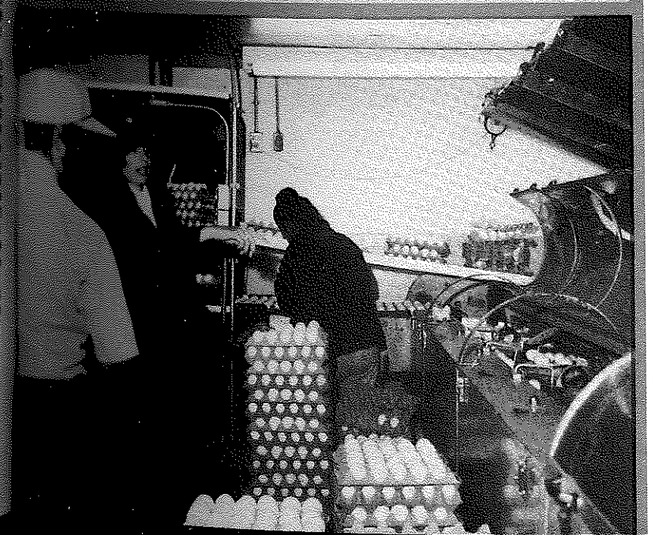
AUTHOR INDEX

AGRICULTURAL EDUCATION

Volume 51 Number 1

July 1978



Theme—Careers In Agriculture —Summer Employment Opporunities

EDPRESS

THEME — CAREERS IN AGRICULTURE — SUMMER EMPLOYMENT OPPORTUNITIES

AGRICULTURAL EDUCATION

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COVER PHOTOS

Top Photo —
Darcy Duenckel is a student in Vocational Floriculture. She has made and sold many floral arrangements as part of her supervised occupational experience program. Here she shows one of her unique dried arrangements. Miss Duenckel's teachers are Bob Kennedy, F. Scott Wilson, Dori Jones and Connie La Face at North Hollywood, CA.

Center Photo —
Wayne Sides is owner of approximately 450 range sheep. He has expanded this business drastically in the past two years and plans to pursue the range sheep business for his livelihood. Wayne also has a sheep shearing business which he operates for other producers. Wayne is a state farmer and a senior at Quartz Hill High School. His teachers are Irving Bjorge, W. Scott Binns and Ed Wyman. (Photos courtesy Richard Tolbert, Anaheim, CA, and Dr. Jay Lark, Cal Poly at Pomona, CA)

Bottom Photo —
Lisa Liser is a member of the Chino High Vocational Agriculture program and has as a part of her supervised occupational educational program the responsibility of quality control for Embly Egg Ranch. She is responsible for feed and egg quality along with disease control for the commercial operation. Her teachers are Toni Williams and Alan Wilkenson.

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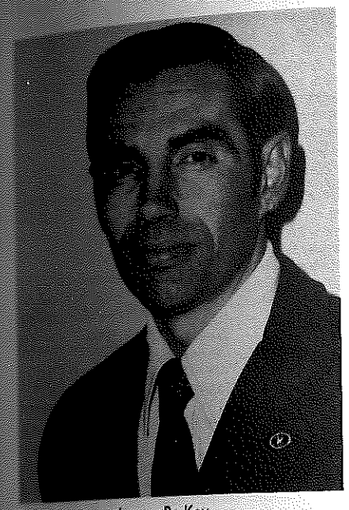
—EDITORIAL—

—Summer Employment
—Careers in Agriculture
—Teaching Agriculture



James P. Key

Some of you may wonder how careers in agriculture and summer employment opportunities fit together. One of the articles in this issue illustrates the point quite well. Summer is an excellent time to carry out the work portion of the cooperative program or have tours for career exploration purposes.

SUMMER COOPERATIVE PROGRAM?

How many of us have stereotyped our thinking to such an extent that we think the work portion of a cooperative program can only be done during the half day of the regular school term? Most students eligible for the cooperative program probably have summer jobs anyway. Why not utilize this time for a learning experience with supervision by the employer and the teacher. An additional dividend the teacher accrues is the visibility given the summer work that is going on during supervision. This free publicity can only aid in keeping that 12 month salary. If you are not on the 12 month salary this might be a good talking point to get summer employment. You can probably convince your Board and Superintendent of the need for a summer coop program more easily than most other types of programs. Try it, you (and they) might like it.

SUMMER CAREER EXPLORATION?

There are several schools in Oklahoma who organize summer tours for career orientation and exploration purposes. One school even offered one unit of credit for the course in the summer. All have reported excellent acceptance of the idea and support from the school and community. Students have indicated this is an excellent way to explore occupations. Other states have reported similar results from their tours. This might be an excellent activity to add to your summer program of activities if you do not already conduct a summer occupations tour.

AG TEACHING — AN AGRICULTURAL CAREER?

As I write this, we are conducting our student teacher conference held at the end of the semester. This conference is conducted in the State Department of Vocational and Technical Education facilities with the help of the State Supervisors. At this conference the student teachers get to know the State Supervisors and visit with them about job opportunities, as well as summarize their student teaching experiences. It occurred to me, considering these new teachers, that we ag teachers probably teach about all the agricultural occupations except our own. Perhaps we should take some time to explain to our students what we do as ag teachers and why we decided to enter this occupation. After all, we know there is a crying shortage of ag teachers and the opportunities are great for those who decide to teach.

AID THE PROFESSION AND OUR STUDENTS

Perhaps we should stress to our students the rewards we get from working with students and helping shape their lives, the job security, the adequate salary (not one that will make you rich, but adequate) and the other joys and benefits of our jobs as ag teachers. We should be realistic with them about the long hours, time away from family, and other characteristics of our job, but at the same time let them know why we chose it.

We could help solve the ag teacher shortage and at the same time offer our students an excellent opportunity.

After all, do you know of a more rewarding occupation, or one which is such a convenient stepping stone to other agri-related jobs if you would like to change? Why don't we take a little time and teach about the occupation of the ag teacher? It could greatly aid the profession and our students at the same time! — Ed

BOOK REVIEW

ESSENTIAL ASPECTS OF CAREER PLANNING AND DEVELOPMENT, by J. C. Atherton and Anthony Mumphrey. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1977, Second Edition, 369 pages, $9.

Atherton and Mumphrey have revised their book (first edition, 1969) by adding two new chapters, updating the material in the fourteen other chapters, and adding titles of significant references which have been published since 1969.

In the preface the authors have stated the purpose of their book ". . . is to assist individuals in making occupational choice, preparing for and entering into the work world, adjusting to conditions of work, and advancing in job responsibiltiy. Attention is given to those personal and social competencies needed by persons entering the field of employment."

The book seems to have been written for two major audiences: first, for professionals who are involved in adult and continuing education; and second, for young adults and others who are planning their own careers and developing competencies to enhance their career achievements. It is not written for the majority of the high school students.

The book treats many topics within the framework of the sixteen chapters. The first eight chapters deal with the nature of the world of work, planning and preparing for a career, the nature and importance of short-term post-secondary education, social and personal competencies needed, and finally with locating and applying for employment. The final eight chapters treat topics related to post-employment matters: making a good beginning, working with others, employer-employee relations, improving job competency, job security, use of leisure time, employee benefits and privileges, professional and civic organizations, and continuing education programs.

The book contains many tried and proven principles which should be quite helpful to beginning teachers and to others who are willing to learn. Some charts and figures would be helpful to provide supporting evidence for the generalizations which have been given. However, the authors have rich backgrounds of experience which comes through to the careful reader, lending authenticity to the concepts and principles. Dr. J. C. Atherton at Louisiana State University is well-known to many leaders in vocational agriculture for his work in teacher education. Dr. Anthony Mumphrey, Dean of Louisiana State University at Eunice, has had more than 25 years of experience in the fields of counseling and teaching education.

This book contains many useful concepts for teachers of agriculture, especially those teachers who want to improve effectiveness with young adults.

O. Donald Meaders, Professor
Agribusiness and
Natural Resources Education
Michigan State University
E. Lansing, MI

BEEF CATTLE SCIENCE by M. E. Ensminger. Danville, Ill.: Interstate Printers and Publishers, 1976, Fifth Edition, 1556 pp. $16.50.

This book will surely share space with other monumental works designed to bring enlightenment to the student of livestock production. Described in detail, yet in layman's language, the entire spectrum of beef production and marketing is stimulating reading at its best. In three parts: General Beef Cattle; Cow-Calf System, Stockers; and Cattle Feedlots and Pasture Finishing, the book covers in meticulous detail and graphically the aspects of successful beef production.

With more and more interest in efficiency in livestock production the student, the farmer, the arm-chair cattleman will find this a book difficult to put down. With research findings unfolding with almost breathtaking speed, one might be tempted to think it is difficult to write a book which will "last." This book, without much doubt, will last for years since it emphasizes principles, their application, and does an unusually fine job of bringing together new developments and findings related to the beef industry. It ends on a note of charting the future which the author feels the industry will experience.

Of more than passing interest, in this Fifth Edition, 53 breeds of cattle are covered — that's 32 new breeds, or more than double the 21 breeds which were described in the Fourth Edition which appeared a scant 8 years earlier.

Dr. Ensminger is no stranger to students of Animal Science and has authored several books on the subject. Suffice it to say that his credentials are impeccable, his style contagious.

Serious students of beef cattle will all find this a book to be treasured, read, and re-read. It would be helpful to cattlemen, and students at the high school level, post-secondary and college level. It should be on the reference shelves of every school library where there are students of more efficient beef cattle production seeking enlightenment.

William W. Stewart
West Dubuque Community School
Epworth, Iowa

NEW OPPORTUNITIES FOR FEATURES

CENTERPAGES FEATURE — Plans, sketches, pictures, innovations — • 2 center pages •

THIS WORKED FOR ME—Methods of teaching, supervising, doing skills, sharing ideas — • 1 page (3 pages typewritten double spaced) •

THE COUNTRY STORE — Source of free, inexpensive, or hard-to-find items most ag teachers need. Share your sources — • 1 page or less •

YOUR CONTRIBUTIONS FOR THESE NEW FEATURES ARE NEEDED

FROM THE TEACHER'S DESK — Jokes, stories, sayings, attention getters or spice for speeches — • short and sweet •

LETTERS TO THE EDITOR—Share your views, agree, disagree, support, refute — • 1 page or less •

(Please submit articles 2½ months in advance of Theme to allow publication time.)

COMING ISSUES COMING ISSUES COMING ISSUES

AUGUST — Teacher Education in Agriculture — Laying the Foundation for Good Teaching

SEPTEMBER — Student Competition — An Incentive Approach

OCTOBER — Supervisors and Consultants — Important Members of the Team

NOVEMBER — Effective Teaching — What's the Basis?

DECEMBER — Professionalism—That's The Name of the Game

JANUARY — Golden Anniversary Issue — Looking to the Past and the Future

FEBRUARY — FFA — A Valuable Resource For the Agriculture Teacher

MARCH — Classroom Instruction — Getting the Ideas Across

APRIL — Supervised Experience—Doing to Learn — Learning To Do

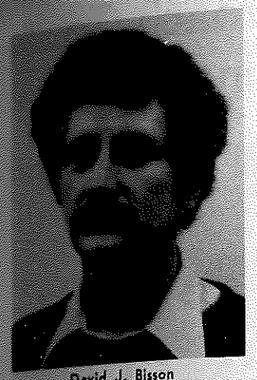
MAY — Agricultural Mechanics — Developing Important Skills

JUNE — Summer Opportunities — Supervision, Planning, In-Service Education, Conferences, Repairs, Other Activities?

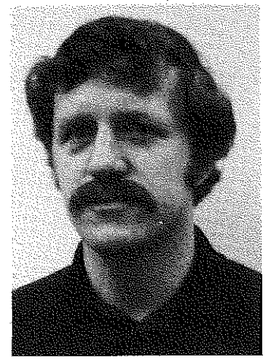
JULY — International Agricultural Education — Filling the World's Breadbasket

COMING ISSUES COMING ISSUES COMING ISSUES

DO AGRI-BUSINESS STUDENTS FIT INTO SUMMER EMPLOYMENT?



David J. Bisson



Doug L. Hanson

by
David J. Bisson
and
Doug L. Hanson
Vo-Ag Teachers
Willmar, MN

Vocational Agriculture has provided Vo-Ag students with extensive training in career exploration. Many of these students have a desire to do further job exploration through summer employment opportunities for a Vo-Ag student.

WILLMAR

We would like to explore these areas with you as they exist in Willmar, Minnesota. Willmar is a thriving agriculture community of 19,000 people. It is located in West-Central Minnesota about 100 miles from metropolitan Minneapolis-St. Paul. Willmar is an agri-business based community supporting the production agriculture of the West-Central Minnesota area. Primary industries are a large turkey processing plant serving the nation's highest turkey production area; several smaller agricultural manufacturing companies, as well as many agri-business firms such as grain elevators, implements, hatcheries and many farm supply outlets, both wholesale and retail.

Willmar's schools have an average enrollment of about 320 students per grade. The Willmar Vo-Ag enrollment is about 340 students in grades 9-12. Willmar also has an area Vocational Technical Institute and a State Junior College.

The Willmar Vo-Ag department offers a summer school program with an enrollment of about 60 students. These students have the opportunity to become employed in a summer agricultural job as part of the summer school program. Students must be enrolled as a summer school student to qualify for the work experience program.

TYPES OF EMPLOYMENT

Students generally have two types of employment opportunities. Many of the jobs are seasonal in nature; beginning in early summer and terminating in early fall. Others will get jobs which lend themselves to the opportunity to continue working on a part-time basis of approximately 20 hours per week during the regular school year. These students will be part of our agri-business on-the-job training program.

Job opportunities are in either production agriculture or agri-business. Our production agriculture students are placed on farms other than their home farms. Many of these students have grown up in the city, but are looking for an opportunity to gain on-farm experience.

These students are able to use their Vo-Ag training as their basic job skills in production agriculture. These jobs include placement in standard areas such as dairy farms, livestock farms and crop farms. We also have several students placed on horse ranches; they have become common near our urban area. Agri-business job placement is as varied as our agricultural industry is in Willmar. However, primary areas of placement are greenhouses, hatcheries, turkey processing, meat retailing, farm implements, campground and self employment.

Job placement is handled in several ways. Many jobs continue on a yearly basis; these jobs are with employers who have had students placed with them before. For these employers, we select students to send to them for interviews. The employers make the final selection based on interviews with the student.

Other students secure jobs on their own, based on want ads, state employment service, friends who already have jobs at a business, and knowledge of employers and employment areas. The instructors then work with employers and students in establishing a training station agreement and a training plan. Often times there are special job situations available for students who meet income or underemployment criteria such as are now available under CETA. By doing some exploration, students may also find jobs through various governmental agencies, especially in natural resources areas. These may be at county parks, state parks, state and national forests. Federal, state and local conservation and natural resources agencies are contacted personally for the jobs.

POSSIBLE AREAS FOR EMPLOYMENT

We have listed some of the areas of employment that you may have overlooked in your job searches.

1. Comprehensive Employment Training Assistance — C.E.T.A. has many programs available for placement of agri-business students who meet the economic employment criteria. Many of the programs vary from year to year dependent upon funds available. Check with your local C.E.T.A. office for details. An example we have used is the employment of a student as a horticulturist in a school landscape arboretum.
2. Campgrounds — Campgrounds and resorts are often excellent sources of summertime job opportunities. They are often look-

(Concluded on page 11)

The Cashmere Program—An Approach To Agriculture Career Education In Washington State

by James Cockle, Vo-Ag Instructor, Cashmere, WA

"Careers in Agriculture" was developed as a part of the Career Education project for Cashmere High School. It is used in the senior Agriculture Occupations class and is one trimester (60 days) in length. The students involved have all completed three or more years of agriculture classes and are in their last trimester before graduation.

NEED FOR THE PROGRAM

Cashmere is located in the central part of the State of Washington. The town has a population of approximately 2,000 people and is agriculturally oriented. The primary economic crops are those of apples, pears, and other fruits. Many students are interested in agriculturally related careers. This particular course was developed to meet the needs of those students. The entire community functions around the schools and provides ample support for all programs. The business community became very involved in the Career Education program and has been instrumental in the success of the project.

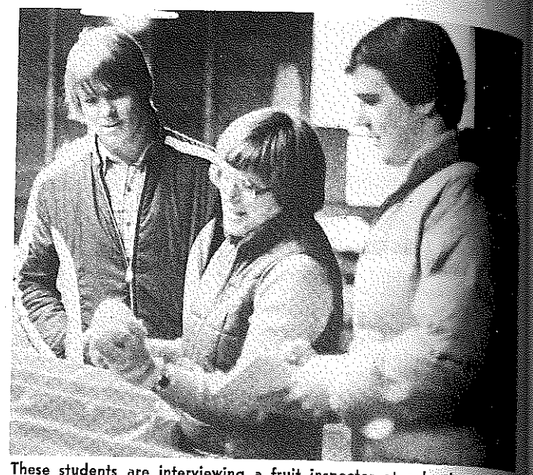
The basic needs for the program can be more easily explained by describing its major goals. The first objective was to meet the needs of the individual student. The students were definitely interested in agriculture as evidenced by their enrollment in the elective agriculture classes throughout their high school career. Many of them will eventually work in the immediate geographical area in some agriculturally related occupation. A class which provided the student an opportunity to explore local careers in agriculture was necessary.

The second objective was to meet the needs of the school. The Cashmere School District has developed specific goals for Career Education. All teachers were encouraged to shape their courses around the concepts of Career Education. Goals related to the world of work were developed by incorporating new ideas into existing subjects. Relating the study of agriculture to the world of work was an important part of the overall program. The goals were developed over a period of several years and have been used as guidelines by many other districts in developing new programs.

Community goals were involved in achieving the third objective. The community had certain needs to be satisfied in training students. The business community became involved because of its hope that many of the students would remain in the area and go directly into the local work force. They take special pride in having students select their occupational area for study.

PLANNING, DEVELOPMENT AND STATUS OF THE CURRENT PROGRAM

Career Education is an important fundamental of an agricultural education system. We, as teachers, must recognize the importance of Career Education and its implementation into our present programs. This unit was developed specifically for high school seniors, but could easily be used with an eleventh grade group of students. Furthermore, any teacher could use this unit and relate it to his particular area of instruction.



These students are interviewing a fruit inspector at a local warehouse.

The involvement of the class followed specific procedures. The students worked in groups of two or three and selected an occupational cluster in which they were interested as a possible career choice. Since this was the senior Agriculture Business and Occupations class, the only stipulation was their selected occupation be related to agriculture.

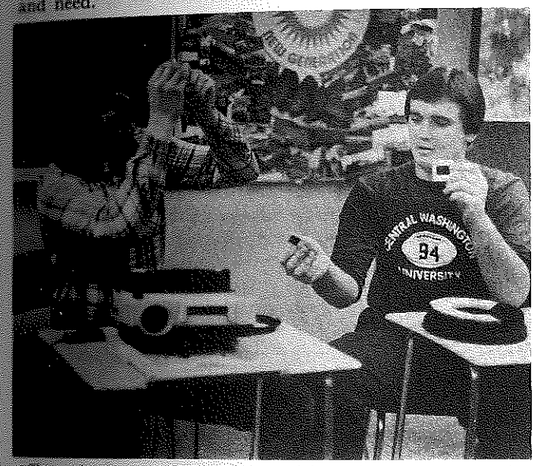
The students developed a standard interview form which included such areas as: salary, educational requirements, fringe benefits, hours, chance for promotions, age requirements, worker satisfaction on the job, equipment and tools required, and other individually related questions. Since the students would be contacting businesses during school hours, a letter was sent home to each of the student's parents explaining the project and obtaining parental permission.

The students selected various local business firms to visit. Managers were contacted by the vo-ag instructor to make arrangements for the student visitations. It should again be stressed that the businessmen were very cooperative and receptive to this idea of Career Education in our public schools. The community has an agricultural base which provides a variety of careers from which to choose. The students selected from one of the following businesses: a fruit processing warehouse, meat packing plant, National Forest Service, lumber company, helicopter services firm, farm equipment dealers, carpentry shop, Aplets and Cotlets factory, repair of recreational vehicles shop, distributor of petroleum products, fish hatchery, and others.

They were allowed fifteen hours of class time, which they were to use for touring the occupational cluster they had selected. During the tours, which were supervised by the managers of the businesses, each group of students interviewed all of the workers involved and completed an interview form. They also took pictures of workers on the job. Additionally, many of the student groups spent supplemental time on their own (after school and weekends) satisfying their individual needs. In fact, one group reported more than forty hours had been used in talking to the workers and taking slide pictures.

The students returned to the classroom and began organizing the material they had obtained into a descriptive report of a specific career cluster. The films were developed and each group developed a slide presentation pertaining to their selected occupation. This preparation included title shots and selected background music for their presentations. The written report was taped and synchronized with the slides for classroom presentation. The presentations were shared with all members of the class.

An additional benefit of this project was utilization of the slide-tape presentation by elementary teachers in their career awareness programs. They were also shown to several community groups by the students. This particular unit took a total of twelve weeks. The time frame for the program can be varied depending on class size and depth of study the instructor felt appropriate to student maturity and need.



The students shown here are viewing slides and organizing materials for their written presentation.

Instructional Materials Required

1 camera (per group)
3 rolls of color slide film (per group)
10 flash cubes (per group)
1 cassette tape recorder with synchronizer
1 cassette tape (per group)
1 carousel slide projector
1 screen

APPRAISAL OF THE PROGRAM

The project, as a whole, was very successful. The students accepted responsibility well, and the businessmen and workers were very cooperative. The students felt they had learned much more by actually being with the workers than they could have through books, films, guest speakers, and lecturers. They did an excellent job in preparing and presenting the materials developed and also learned to set up a slide-tape series. The presentations to the community groups also helped develop public relations within the school district. Some of the student presentations are being shown at various nation-wide workshops on Career Education in Boston, St. Louis, Denver, Knoxville, and Portland. An article describing the unit on Careers in Agriculture appeared in the April, 1977, edition of "The Career Education Workshop" published monthly by Parker Publishing Company, Inc., West Nyack, New York.

The student is viewing his slides to determine where in his presentation they will be used.

PLANS FOR CONTINUING THE PROGRAM

"Careers in Agriculture" has become an important part of the curriculum in studying agriculture occupations. In fact, the student handbook now carries a description of this trimester's class. The students elect to take it along with registering for other classes. The program is re-evaluated each year and revisions are made in order to keep up with the changing times. The idea of incorporating student-made slide-tape presentations into the classroom is certainly not new. It proved, however, to be a very effective method for teaching Career Education in my senior agriculture class at Cashmere High School.

In conclusion, the program speaks for itself. The students are interested and take great pride in having been a part of the class. It will be continued at Cashmere as long as it continues to meet student needs and career objectives.

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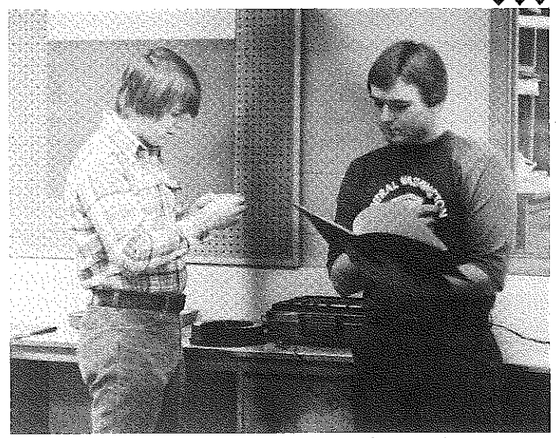
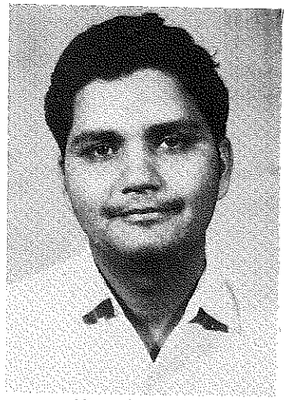


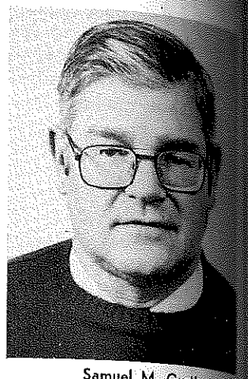
These students are putting the final touches on their taped presentation.



Himanshu Pandya

A Follow-Up Analysis of Agricultural Interest

by
Himanshu Pandya
Graduate Assistant in Agricultural Education
The Pennsylvania State University
and
Samuel M. Curtis
Associate Professor of Agricultural Education
The Pennsylvania State University



Samuel M. Curtis

Once upon a time, when high schools were small, teachers of agriculture had an opportunity to counsel all students who desired to elect vocational agriculture. Today, it is a complex task to assist the large numbers of students who make course selections. Thus, it can no longer be the sole responsibility of a teacher. Since 1965, use of the Agricultural and Biological Interest Inventory (Walker et. al. 1965, 1971) has increased considerably as a graduate aid for both student and teacher. The best results are obtained by the proper administration of the inventory and by the proper interpretation of the survey items on the inventory.

Curtis (1974a) reported that many eighth grade students with a high score on the Agricultural and Biological Interest Inventory declare their interest in agriculture courses but then do not sign up the following year. Walker et. al. (1962) stated that students may not have chosen to take vocational agriculture because of a greater interest in occupations other than in agriculture, or that their eighth grade counseling did not adequately disclose to them their interest in agriculture.

Given the reported differences between agriculture interest of eighth graders and vocational agricultural enrollment in ninth grade, this follow-up study was conducted of those students previously inventoried by Curtis (1974). The purpose was to re-evaluate the data and the inventory after students' enrollment and success in vocational agriculture could be identified.

DATA AND METHOD

In 1971-72, the Agricultural and Biological Interest Inventory was given to 2,376 eighth grade students in 18 different schools in Pennsylvania by Curtis (1974a). Students' interest scores were reported by total and by subscales. Students also responded to the demographic as well as to the 18 other items on the survey. The Penn State Scoring Key developed by Stevens and Curtis was used (unpublished).

In 1977, the names of the students who took the Agricultural and Biological Interest Inventory in 1972 were sent to their respective schools and the agriculture teachers were asked to identify those students who completed two or more years of vocational agriculture classes in high school (successful vocational agriculture students). Teachers identified 129 successful students out of 221 who initially enrolled. A random sample of 228 students was selected from the total group who had taken the inventory in 1971-72, but who never enrolled in vo-ag classes.

Analysis of variance, single classification, was performed on the total and part scores of the interest inventory. Chi-square was conducted on the 18 different yes or no response items to which students reacted on the inventory answer sheet. The first 10 of these items record previous agricultural experiences while the remaining eight are selections for study in agriculture.

COMPARISON OF MEAN INTEREST SCORES

Table 1 shows the mean interest scores recorded in 1971-72 of the students who enrolled in the agriculture courses initially, who completed two years, and who didn't enroll at all in the agricultural courses. The initially enrolled and the successful vocational agriculture students had significantly higher scores in all the areas of agricultural interest. Of those enrolled two years, one hundred and ten out of 129 had declared when in eighth grade that they would like to take agriculture in the ninth grade (Curtis 1974a). There were no differences in inventory scores between those who initially enrolled and those who completed two years.

Table 1. Mean interest scores of eighth grade students who enrolled initially, completed two years, and who never enrolled in the agricultural courses.

Enrollment	Total students	Total mean score	Animals	Plants	Mechanics	Business
Initially enrolled	221	127.8[a]	30.5[a]	30.5[a]	35.6[a]	31.1[a]
Enrolled in Agriculture for two years	129	126.9[a]	30.7[a]	31.3[a]	33.8[a]	31.1[a]
Never enrolled in Agriculture	228	101.8	23.5	25.2	27.5	25.2

[a]significant over "never enrolled" at the .01 level by analysis of variance and t-test for differences between means.

COMPARISON OF EXPERIENCES

Response on each of the yes-no survey items of the inventory was analyzed by using chi-square. The response of the successful ag students was compared with the group who never enrolled. Table 2 shows the responses of the students to the different experiences by category. Successful students differed significantly on certain areas of experience from those students who never enrolled. The students were asked which of their agriculturally related experiences they had enjoyed most. A large number of successful students enjoyed four experiences: Helping with livestock (24.8 percent), operating farm, garden, or lawn machines (18.6 percent), helping to adjust or repair small machines (18.6 percent), and helping with crops on farm (12.4 percent). The number of agriculture students with these four experiences was significantly higher than the non-agricultural group. In the non-agricultural group the percentage who had operated lawn and garden machines was significantly higher. Twenty-two percent of this group liked helping to adjust or repair small machines, 15.9 percent of the students enjoyed operating farm, garden, or lawn machines and 14.5 percent of the students liked helping with livestock. It was interesting to note that 10 percent of the successful agriculture students and 22 percent of the non-agriculture students didn't respond to any of the ten listed experiences.

Table 2. Responses of the successful agriculture students (and non-agriculture) to the different experiences recorded on the interest survey.

Type of Experience	Successful agricultural students: No. of students with experience	% of students with experience	% of students[3] enjoyed experience	Non-agricultural students: No. of students with experience	% of students with experience	% of students[2] enjoyed experience
1. Helping with crops	94[a]	72.8	12.4	115	50.9	4.4
2. Helping with livestock	93[a]	72.1	24.8	122	53.8	14.5
3. Care of small animals	106[a]	82.2	8.5	146	62.2	9.6
4. Care for garden and flowers	95[a]	73.6	4.6	129	56.6	2.6
5. Care of lawn, shrubs and trees	105	81.4	.7	174	76.3	4.8
6. Care of park or forest	29	22.5	.7	37	.16	1.3
7. Farm or garden supply store	14	10.8	—	24	0.1	.8
8. Prepare food products for sale	29	22.5	.7	46	0.2	2.2
9. Operate farm, garden, or lawn machines	19	14.7	18.6	173[a]	75.9	15.9
10. Helping to adjust or repair small machines	94	72.8	18.6	155	70.0	22.0

[1]13 students (10%) out of 129 didn't record interest.
[2]51 students (22%) out of 228 didn't record interest.
[3]Significant at the .01 level by chi-square test.

COMPARISON OF LEARNING AREAS

Table 3 shows the students' choices among eight different areas of agriculture about which they would like to learn. Significantly higher numbers of the successful students were interested in learning about raising livestock and growing crops, mechanics and tractor operation, and soil, water, and wildlife conservation, than the non-agricultural students. Significantly more interest was shown by the non-agricultural students in the business and store operation and the job opportunities for young workers.

Table 3. Selection of different areas chosen by students, as the area they would like to learn about.

Subject	Successful agricultural students: No. of Students	% of the students	Non-agricultural students: No. of Students	% of students
1. Raising livestock and growing crops	75[a]	58.1	73	32.0
2. Business and store operation	15	11.6	68[a]	29.8
3. Mechanics and tractor operation	95[a]	73.6	120	52.6
4. Processing and selling of food products	9	7.0	20	8.8
5. Growing and selling of plants and flowers	19	14.7	21	9.2
6. Soil, water, and wildlife conservation	65[a]	50.3	78	34.2
7. Forestry and tree care	31	24.0	31	16.2
8. Job opportunities for young workers	51	39.5	130[a]	57.0

[a]significant at the .01 level by chi-square test.

CONCLUSIONS

Table 1 shows that successful vocational agriculture students had higher interest scores on the Agricultural and Biological Interest Inventory than students who chose not to enroll. This result confirms those of Walker (1962) and Curtis (1974a,b). Curtis reported in his study that 221 students enrolled in ninth grade agriculture classes (1974 a,b). This follow-up study shows that of these, only 129 students enrolled for more than two years. There were no differences in scores between those who initially enrolled and those who completed two years, hence interest scores do not explain the decrease in course enrollment of 92 students. Data show that the majority of students with higher scores and who answered "yes" to the question, "Would you like to take agricultural courses in the ninth grade?" remained in the program for two years or more.

This study affirms that a student's inventory score is one of the important predictors to use when counseling students about agriculture courses, but suggests other facts also must be taken into consideration.

Table 2 shows that the students who took the agricultural courses significantly differed on agricultural experiences, such as helping with crops, helping with livestock, care of small animals, care of garden and flowers, and operating farm, garden or lawn machines from those students who chose not to enroll. It is interesting to note that proportionally more students from the non-agricultural group had experiences of operating farm, garden, or lawn machines than the students who enrolled in agriculture.

Table 3 shows the different areas of interest of successful agriculture and non-agricultural students. A higher percentage of non-agricultural students expressed interest in learning about job opportunities for young workers, and business and store operation, while significantly higher numbers of agriculture students were interested in learning about growing crops and livestock, mechanics and tractor operation, and soil conservation. It shows that students with more experience with crops and animals are more interested in taking agricultural courses while students who had high experience with lawn and garden machines liked to learn about business and job opportunities. This data seems to

(Concluded on page 11)

DECISION MAKING AND CAREER CHOICE

by
Gilbert A. Long
Head, Agricultural Education
Utah State University
Logan, UT

Decision making has merited recent attention because of its importance to career choice. I would point out that decision making has continuing importance to agricultural education because of the managerial preparation that vocational agriculture has promoted. The problem-solving mode of teaching promoted by early leaders in agricultural education is still a powerful tool in the hands of the skilled teacher. In that decision making is central to career choice and to managerial success, I believe it merits consideration as a process — a process that, with further understanding, can be incorporated more successfully into preparation programs and into secondary and post-secondary education programs.

STEPS

Decision-making is not the cut and dried six step process described in most textbooks.

1. Identification of the problem.
2. Obtaining necessary information.
3. Production of possible solutions.
4. Evaluation of such solutions.
5. Selection of a strategy for performance.
6. Actual performance of an action or actions and subsequent learning and revision.

PRACTICE

Different people have different decision styles. Some make accurate choices in the presence of relatively large measures of uncertainty. Others require all the information available before deciding. In either case, decision-making skills can be improved to the extent that students are given practice and feedback from which they can refine their skill. Practice in decision making is not prevalent in the textbook oriented read-recite classroom. The decreased emphasis given supervised occupational experience by many of today's vocational agriculture teachers argues that relevant problems from that source find their way into classroom instruction on an infrequent basis. The "Instructional Units on Profit Maximizing Principles," written by Floyd McCormick, provides simulated economic problems for students to exercise decision skills that are valuable. Too many of our instructional resources ignore this important managerial skill.

An emphasis on problem solving provides relevant managerial preparation as well as practice in decision making. The basic teaching modes used typically include consideration of adoption of an alternative (Yes/No or "fork of the road") with consideration of impinging variables, or the possibilities/factors approach in which two or more alternatives are considered together with the factors important to the decision. In both problem-solving modes, a high level of student participation is encouraged in selecting the problem, stating the problem, listing the advantages and disadvantages for each alternative, and for each student making and recording his own decision (usually he is asked to write so as to insure what he chooses). The importance of providing information requiring judgment rather than memorization needs to be emphasized. Decision making skills must be practiced to be improved.

RECORD KEEPING

A second area for increased emphasis with decision making is the area of record keeping. Too often the records are kept but little is done to evaluate through efficiency factors and application of economic principles followed by a consideration of alternatives. Again, decision making must be practiced to be improved.

Career choice requires a look at one's interests and skills just as improving one's decision skills requires a self analysis to see if we tend to be optimistic or pessimistic in our general outlook. While predicting the stock market or some other variable that provides systematic feedback aids insight into our personal decision making tendencies, repetition is not that practical in career choice — unless realistic simulations are used. Vocational decisions include a commitment to education that make frequent changes costly. Too often, students are not provided enough career information help, together with opportunity to analyze their interests and abilities. Little or no practice or preparation for decision making is provided. Too often, the vocational agriculture teacher assumes that his beginning class is composed of students who have chosen to take agriculture based upon an adequate knowledge of alternatives and some help in self evaluation of interests and abilities.

A more correct assumption would be that these students need these two kinds of help plus some understanding of decision making in order to begin to fix their vocational goals. An adapted program of agricultural career orientation would be appropriate in school districts that have career orientation programs to provide knowledge of career opportunities. Where local districts fail to provide a career orientation program, the vocational teacher will need to provide this general career orientation as well as a more specific coverage of agricultural careers.

POSSIBLE PROGRAM

A topical outline might include the following:

I. Assess career orientation provided prior to high school.
II. Provide agricultural career information:
   A. Industrial speakers.
   B. Students conduct interviews focusing on how respondent became established in his employment.
   C. Other.
III. Provide materials to aid student's self assessment of interest and skills ("Biological Interest Inventory," Interstate Publishers: Oklahoma R.C.U.'s "Self Discovery.")
IV. Incorporate problem solving mode of instruction to aid decision making ability.
V. Provide information relative to how to improve one's decision making.
VI. Work towards goal of each student making tentative career choice and a supporting educational and industry experience plan.

Ginsburg noted three phases as constituting a career choice continuum; a fantasy phase, a tentative phase, and a realistic phase. Each beginning agricultural class will have students at each

(Concluded on Page 11)

CONTINUED DECISION MAKING . . .

of these phases of career choice. The kind of commitment necessary for high quality job preparation requires vocational agriculture teachers to recognize where their students are on the career choice continuum and provide awareness, exploration, orientation, and preparation for work experiences. Exploratory agricultural programs must be part of the vocational agriculture program and an emphasis on decision making theory and practice is needed to insure that students make career choices that will be satisfying. The increased commitment to preparing for agricultural employment should do much towards making up for the time taken to aid student career choice. ◆◆◆

CONTINUED DO AGRI-BUSINESS STUDENTS . . .

ing for students with training in small engines, horticulture, turf management, and recreational management. We have placed several students in a local campground for recreational management training.

3. State Parks — Parks, both county and state, may have summer openings for students interested in the areas of forestry, natural resources, wildlife management. Job duties include trail construction and maintenance, brush clearing, tree planting, habitat improvement, and wildlife management.
4. Horse farms — Urban areas are finding an increase in the number of horses and a corresponding need for horse training and boarding. We have had students placed on horse farms as training assistants and riding instructors. Duties also include horse management and care. Some of the students have expanded on their training to become self employed as trainers or in the boarding of horses.
5. Self Employment — We have aided students to secure loans to purchase machinery, such as swathers, to become custom machinery operators and managers. While you must be wary in selecting these students, excellent projects can result from this type of job placement.

These are but a few of the opportunities that may exist in your area. A search of your area should produce even more opportunities for summer employment. ◆◆◆

CONTINUED A FOLLOW-UP ANALYSIS . . .

point to a need for vocational counseling as well as appropriate vocational programming to meet student needs. Apparently vocational interest, although not in agriculture, exists for this group.

Table 3 also shows that the potential students in agriculture were not as motivated as the non-agricultural group toward learning about job opportunities for young workers, and business and store operation, which are the basic components of the business world of work.

It would be interesting to know why some students in both groups, 10 and 22 percent respectively, didn't show any interest in the agricultural activities. It seems that more effective career education in elementary and junior high schools is needed to help students identify their vocational interests. ◆◆◆

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SUCCEEDING ON YOUR FIRST JOB, by Ralph J. Woodin. Columbus, Ohio: Ohio Agricultural Education Curriculum Materials Service, The Ohio State University, 1977, 166 pp., $5.00.

This publication is designed to assist students locate, obtain and succeed on their first job. In addition, the publication focuses upon personal resource management. Although many of the examples and illustrations are oriented toward agricultural education, the basic concepts presented have applicability for students in all occupational education programs.

The publication is composed of eleven sequential pamphlets. Pamphlet One focuses upon the career decision-making process. Information and forms are included for the student to complete a self appraisal for use in selecting careers. Pamphlet Two presents information and procedures to follow in locating job vacancies. Included are sections on using private employment agencies, help wanted ads and emergency work programs. Pamphlet Three details procedures to follow in preparing a resume and completing job applications. A section is included which describes practices to follow for successful job interviews.

Pamphlet Four emphasizes the importance of personal hygiene and adequate health care. Exercises are included to assist the student evaluate his/her personal hygiene practices. Commonly used patient forms used by dentists and physicians are provided for students to complete. Pamphlet Five presents an overview of getting started on the first job. Activities involve students in the completion of forms commonly used in business and industry. These activities include completing employment record cards, employee withholding allowance certificates, health insurance forms, charitable deduction forms and union membership enrollment forms. Pamphlet Six enumerates on the importance of developing positive work attitudes. A section is included which stresses the value of getting along with fellow employees and the resolution of conflict.

The final five pamphlets focus upon various areas of personal resource management. Sections are included which relate to the following areas of personal resource management: using personal savings and checking accounts, using credit, developing a personal record keeping system, developing budgets and allocating money, developing a personal insurance protection program. The sections on personal resource management include activities whereby students are involved in such exercises as: completing withdrawal and deposit slips, maintaining a check register, filling out loan applications, computing the cost of credit, developing a monthly budget and completing applications for auto insurance.

The author is Professor Emeritus of Agricultural Education and has a distinguished career as a teacher of vocational agriculture, teacher educator and administrator. Dr. Woodin has received state, regional and national recognition for his contributions to vocational education and career education. He is the author of numerous articles, pamphlets, reports and books and has been active in many national organizations. Dr. Woodin has developed an up-to-date student reference which should be readily understood by high school students. The pamphlets are well illustrated and include practical exercises for students to complete. The pamphlets contain copies of numerous forms currently used in business and industry.

Edgar Yoder
VPI&SU
Blacksburg, Virginia

FEATURING—

BIGGER AND BETTER THAN EVER BEFORE:

by
Teri Dee Yeates
Information Intern
National FFA Center

The FFA has announced plans to expand its National Agricultural Career Show held in conjunction with the annual National FFA Convention in Kansas City in November. Plans for expansion of the 12-year-old showcase of careers in the nation's agricultural industry include a move from the Municipal Auditorium Exhibit Hall into the new H. Roe Bartle Exhibition Hall where nearly two acres of exhibit space will be available.

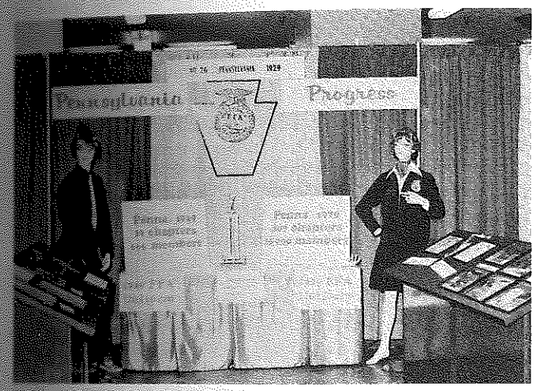
Previously open only to non-profit agricultural trade associations, professional societies and educational institutions serving agriculture, the new show guidelines also open the doors to commercial agri-business firms. According to National FFA Executive Secretary, Coleman Harris, the show will now be open to exhibitors who are major National FFA Foundation Sponsors and to *The National FUTURE FARMER Magazine* advertisers who placed one or more pages of advertising in the current or past year. "We want to expand the educational nature of the show and display an even wider variety of career opportunities," explains Harris, pointing out that "more than 20,000 FFA members, parents and business leaders, and 2,500 Vocational Agriculture instructors will be attending this year's convention."

The National FFA Convention, of which the National Agricultural Career Show is a part, is the world's largest annual National Convention of young people preparing for careers in agriculture. The convention was first held in Kansas City in 1928. This year's convention will mark the 510,000 member organization's 50th anniversary.

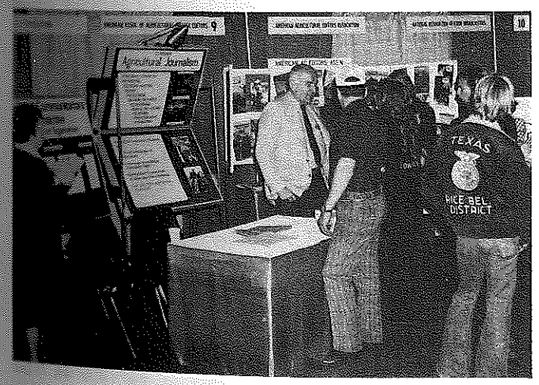
In addition to portraying careers in agriculture, firms that qualify to exhibit are being asked to show new or emerging types of agricultural technology being developed. Education required for a career in agriculture and job opportunities in any field of agriculture may also be displayed. Exhibitors will have professionally qualified persons on hand for consultation and for answering questions. Many exhibitors will have literature to distribute but actual sale of merchandise will not be permitted.

For more information about the National Agricultural Career Show, write or phone Mr. George Verzagt, National FFA Center, Alexandria, VA 22309 (703-360-3600). ◆◆◆

EXHIBITS WILL SHOW NEW OR EMERGING AG TECHNOLOGY

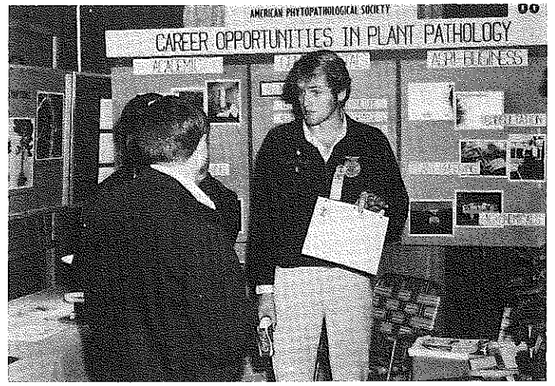


OPEN TO STATE ASSOCIATIONS

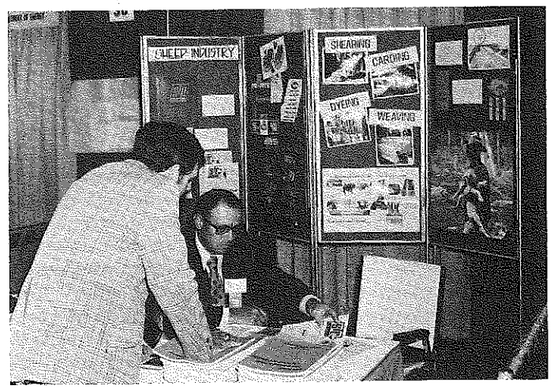


OPEN TO NON-PROFIT AGRICULTURAL TRADE ASSOCIATIONS

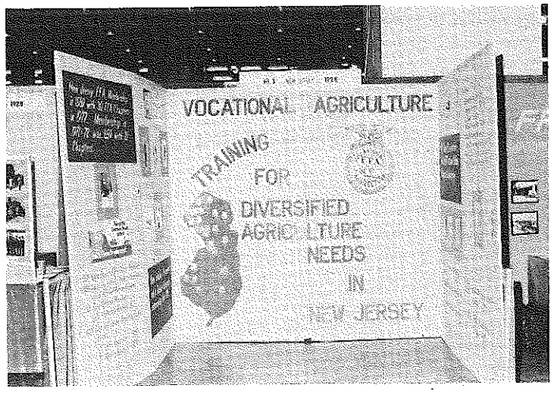
TWO ACRES OF EXHIBIT SPACE WILL BE AVAILABLE



OPEN TO PROFESSIONAL SOCIETIES



OPEN TO COMMERCIAL AGRI-BUSINESS FIRMS



A SUPERINTENDENT SPEAKS OUT— COMMUNICATING YOUR SUMMER PROGRAM

by
Wayne Drexler
Superintendent
Western Dubuque Community Schools
Epworth, IA

Dear Dr. Key:

I am enclosing a copy of a symposium presentation given by our Superintendent of Schools, Wayne Drexler, last fall at a meeting our Sub-District Vo-Ag teachers sponsored in an attempt to open up some channels of communication between Vo-Ag men, Administrators, and Counselors. In our group, we have thirteen schools, involving seventeen Instructors. We are probably not unique in that we find warning signals of a deterioration in communications and a likely result of less emphasis and understanding, plus support. We included a farmer (former State Farmer), a high school principal, an Ag-Businessman, and a School Board member (another farmer). Each was instructed to address specific questions we proposed and each had at least a month to prepare his remarks. For a beginning, almost all of the persons who attended indicated a positive response. Time alone will tell whether we achieved our initial objective of opening up some new channels of communication. It is my hope we can make an annual event of the project. It was a barbecued "Iowa Chop" plus a light lunch including baked beans, salad, rolls, coffee, cake, etc.

I am sending the enclosure along because of the relevance of the comments Mr. Drexler made to ALL VO-AG TEACHERS EVERYWHERE. If we can't see the handwriting on the wall from the man who ultimately decides and recommends to the Board the urgency of developing and conducting Summer Programs, then I have little sympathy for anyone. Vo-Ag will "go down the drain" for that one reason, in my humble opinion, if we as Vo-Ag teachers allow it to do so. I realize I'm a little late for June, but I just simply did not get things put together before now. The two questions Mr. Drexler was asked to respond to were as follows:

(1) The need for Vo-Ag to serve Adult groups.

(2) The vital nature of an active, planned Summer Program in keeping the Vo-Ag program Vocational.

I thought it was worth sharing anyway. Best Regards,

Sincerely,
William W. Stewart
Vo-Ag Instructor
Epworth, Iowa 52045

I firmly believe that in the type of rural school district that most of us work in, as the fortune of the farmer goes, so goes the success of the local school. It has often been rightly said that when the farmer prospers, so does the rest of the community, and that certainly includes the school district. As most of you know, bond issues and school levies fare much better in an economically prosperous community. Anything that the school can do to improve the chances of a good agricultural outlook in turn improves its own well being.

ADULT GROUPS

Adult farm groups connected with improving agriculture offers perhaps the best way possible for the school and its patrons to accomplish mutual successes. If you help an individual become more successful in his work, he is likely to be indebted to you in turn. Adult farm classes, when instituted and conducted in a positive way, can present a wholesome picture of the school. Few other opportunities allow the school this excellent public relations image. In fact, if the school could get adult groups as interested in other phases of the total educational program as you command in your adult classes, maybe education wouldn't be fighting for its very existence in many parts of our country today. I can certainly endorse the concept of adult classes in vocational agriculture.

SUMMER VO-AG PROGRAM

For many of the same reasons, I view a well organized summer vocational agriculture program as an asset to the school. Again, the excellent opportunity to bring the school onto the farm exists. Good instructors do not wait for their students to come to them. They make regular visits to their homes and seek out their questions and problems and then try to help them reach a solution. The key here, of course, is the enthusiasm and willingness of the instructor to have a well planned program. He must carefully build his program and his department's image and then let others know about his efforts.

A weekly news column in the hometown newspaper; a printed schedule of coming events; activities both instructional and semi-social, such as the county fair, are all effective means of advertising your wares. You must let your clientele know that you are genuinely interested and that you are willing to spend the time to make the summer program work and mean something.

Let your principal and superintendent know what you are doing by keeping them posted on your activities. Don't forget the board of education who have ultimate control over all parts of the school curriculum. If you have board members who are farmers or in farm related businesses, spend some time with them explaining what you are doing and solicit their input. Above all, don't be afraid to promote your own public image by seeking worthwhile publicity for what you are doing. Involve parents whenever you can. Remember when you are working with their children on their farm you have a chance to promote your program and the school in general as nobody else has, and please don't undersell the power of positive thinking in these relationships with others.

Finally, gentlemen, and perhaps most importantly, never lose sight of the fact that vocational agriculture, with its adult and summer programs, will be forced to compete for the ever lessening educational dollar. Priorities will be the name of the game in all school planning.

Your summer program will survive only if it does a service in the school system that is more important than some other part of the competing curriculum.

"SUMMERIZING" Your Summer Program

Alvin H. Halcomb

by
Alvin H. Halcomb
Subject Matter Specialist
Agri-Business Education Supervision
Auburn, AL

Very few people would consider allowing their automobile to face a hard winter without having it winterized. It is just good sense to winterize it.

Trouble would surely arise if necessary preparations were not made. In other words, a person might find himself without a means of transportation some cold morning.

What does all this talk have to do with a vocational agriculture/agri-business teacher's summer program? It has a lot to do with it if we expect to continue on a twelve month contract. Just as we would "winterize" our automobiles for protection, we need to be sure our summer programs are "summerized".

To insure that everything about a summer program is functioning properly, let's check it on a "summerizing" diagnostic machine. If problem areas are indicated, let's also suggest some possible adjustments that need to be made.

For example, the machine might indicate that the summer program is on a hit-and-miss basis. Things are not running as smoothly as they should. This condition is usually caused by poor planning. A good running summer program requires *"unleaded"* planning. Too much *"lead"* in a teacher's tank will cause hesitations, slow downs, and poor performance.

To insure smooth performance, the *"timing"* must be right. A written program of work should be made and followed. First, jot down all *"set"* activities, such as FFA conventions, in-service workshops, annual conferences, vacations, etc. Then, list other activities on a weekly basis, such as adult visitations and student supervisory visits at home, on the farm or at on-job work stations.

Proper *"timing"* will insure that all phases of the program receive attention. Time should be devoted to FFA officer training sessions, chapter meetings, and planning chapter activities for the coming school year. Some time should be spent in developing teaching materials — lesson plans, visual aids, course outlines, etc. Adult work will also require some time. A certain amount of shop and laboratory maintenance must be done.

Several other items should be checked to maintain a good summer program. What about the *"shocks"*? Are you shocked that people in the community wonder what you do during the summer? Were you shocked to learn that your contract would be reduced to ten months employment because of poor summer activities?

How about the *"doors"*? Are the doors of your department open at regular hours so people in the community can use the equipment for making repairs, etc.?

Is there too much *"play"* in the steering? Does your program wobble due to poor direction? A good program must have goals and objectives and someone to keep it on the right road. An advisory council or steering committee might help keep the program in line.

Be sure to check all the *"tires"*. Local administrators soon tire of flat summer programs. People in the community get tired of going by the Vo-Ag building and not finding the teacher. Why not post a weekly itinerary on the door? At the end of the day, sit down and recap the day's activities to see if it was properly inflated with activities that prevent program skids.

How long has it been since you tooted your *"horn"*? Don't hesitate to let the public know that you and your students are on the go. Sound off through the local news media. Someone has wisely stated, "He that tooteth not his own horn shall be found tooterless in the day of tooteration".

To keep your summer program on schedule, make sure the *"cruise control"* is functioningly properly. It is used to maintain a constant speed in order to accomplish your goals and objectives.

Check the *"wipers"*. Wipe out criticisms about a dirty classroom and shop. Wipe out old and outdated teaching materials. Wipe out misunderstandings about your work during the summer. In other words, wiper clean!

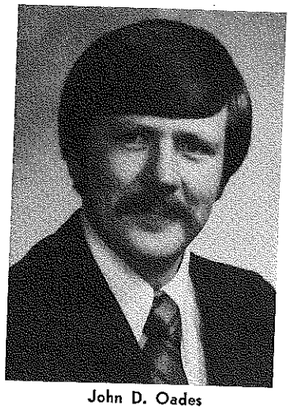
To protect the *"finish"* on your summer program, apply a good coat of *"wax"*. Wax strong with adults in the community. Wax strong with FFA officer training sessions. Wax toward full development of a strong, enduring relationship with your administrators.

Summers get hot. Be sure to check your *"air"*. Keep your *"cool"* when difficulties arise — air things out, but don't blow a fuse. Well planned summer programs usually prevent this type of problem.

A well planned and implemented summer program of work is a good *"warranty"* for continued summer employment. Be sure that the local administrators and district supervisors receive a copy of the *"warranty"*. Remember, though, that a warranty is not good in cases where neglect and abuse have caused the problem. ◆◆◆

JUSTIFYING YOUR SUMMER PROGRAM OF ACTIVITIES

by
John D. Oades
Teacher Educator
Oregon State University



John D. Oades

Are you employed on a 12-month contract? If you are employed for less than 240 days (11½ months) annually, this article should provide needed assistance. Are you having difficulty justifying continuation of your 12-month contract? If you are, this article should be of some assistance.

Vocational agriculture teachers have long realized the importance of summer activities in their total program effort. To attempt to operate a fully "vocational" agriculture program without a year-around effort is rather like attempting to prepare a professional football team without spring training. Certainly, all agree that the summer months are when agriculture is most active and productive. It is reasonable to assume that the time-honored practice of vocational agriculture programs operating on a year-around basis is as sound as ever.

The problem seems to be that with the current financial crunch in education, we have not been effective in justifying our summer programs. To expect financially besieged school administrators to support our summer programs, on principle alone, is not enough. If we expect 12-month programs, we must be prepared to present detailed "Summer Programs of Activity" in justification of our needs. Such programs must detail the *goals, activities,* and *expected outcomes* of our proposed summer effort. Provided below is an example which includes many of the activities which should be found in every vo-ag Summer Program of Activity:

GOAL I
Supervised Occupational Experience Programs (SOEP projects) of Vocational Agriculture Students.
Activities:
1. Complete a minimum of one SOEP visit to all vo-ag students.
2. Complete a minimum of one supervisory visit per month to all cooperative work experience (CWE) projects.
3. Complete a minimum of 2 supervisory visits to all crop production projects.
4. Complete a minimum of 2 supervisory visits to all area/county/state fair exhibit projects.
5. Develop SOEP sources for future use.

GOAL II
Conduct Instructional Activities Appropriate to Identified Needs of the Vocational Agriculture Students.
Activities:
1. Individualize student instruction through SOEP supervisory activities.
2. Offer short duration instructional activities to meet needs of groups of students. (Examples — irrigation skills, tractor and equipment operation, livestock evaluation, livestock fitting and showing, preparation of fair exhibits, etc.)
Note: Students other than vo-ag enrollees might be involved in this instruction.
3. Individualize instruction through related FFA summer activities.

GOAL III
Complete Advisor Duties to the Future Farmers of America (FFA) Organization.
Activities:
1. Conduct FFA planning/preparation activities for the coming year.
2. Assist officers in conducting a minimum of 2 chapter meetings during the summer months.
3. Prepare and supervise members for summer FFA competitive activities. (Examples — livestock and dairy judging, county/state fair exhibits and contests, other activities as scheduled.

GOAL IV
Conduct Vocational Agriculture Student Recruitment Activities.
Activities:
1. Develop/update materials for identification and recruitment of vocational agriculture students.
2. Visit all prospective vo-ag students (pre-registered or otherwise identified) and their parents.

GOAL V
Complete "Follow-Up" Activities on Vocational Agriculture Program Graduates
Activities:
1. Develop/update 1 and 5 year graduate follow-up questionnaire.
2. Complete "follow-up" survey on graduates out of the program for 1 year.
3. Complete "follow-up" survey on graduates out of the program for 5 years.
4. Plan and implement program changes as indicated necessary by follow-up data (review/approve all proposed changes with advisory committee and administration).

GOAL VI
Develop and Improve the Vocational Agriculture Curriculum.
Activities:
1. Complete agriculture competency studies/reviews necessary for curriculum development. (Examples — read studies, consult advisory committee, conduct competency surveys.)
2. Complete content revisions in the existing curriculum as indicated necessary by follow-up data, studies completed, advisory committee report.
3. Develop curriculum content for new vo-ag course offerings to complement the core vo-ag program.
4. Plan/update the "hands-on" component of the vo-ag curriculum (i.e., plan student learning activities for each instructional unit/job).

GOAL VII
Complete Inventory Control Activities on Vocational Agriculture Equipment and Materials.
Activities:
1. Submit purchase orders for budgeted supplies and equipment.
2. Affix identifying marks and enter on the inventory and new tools or equipment.
3. Sort and store any incoming supplies.
4. Complete and update the vo-ag inventory record (especially critical for new teachers).

GOAL VIII
Attend State Called Vocational Agriculture Teachers Summer Conference.
Activities:
1. Gain approval from your administrator well in advance of conference.
2. Involve yourself actively in the activities of the conference.
3. Record and return home with ideas for improving your vo-ag program.
4. File a report or share verbally your experiences and ideas for program improvement with your administrator.

GOAL IX
Complete Vocational Agriculture Program Evaluation and Planning Activities.
Activities:
1. Plan program evaluation activities to be completed during the coming year.
2. Complete self assessment of your current vo-ag program. (Use State Vo-Ag Program Assessment Instrument.)
3. Develop and/or update the Long Range Program Plan for vo-ag (involve your advisory committee and administration).

GOAL X
Supervise Usage of the Vocational Agriculture Laboratory Facilities.
Activities:
1. Attend to orderly usage of:
   a. The vo-ag shop facilities.
   b. The greenhouse and related horticulture facilities.
   c. The vo-ag land laboratory facility.
2. Supervise aides employed to operate/maintain vo-ag facilities during the summer months.

GOAL XI
Work with the Vocational Agriculture Advisory Committee.
Activities:
1. Hold a minimum of one advisory committee meeting during the summer (more meetings may be necessary for a beginning teacher).
2. Cooperatively, develop a proposed program of activities for the committee for the coming year.

GOAL XII
Maintain Effective Communications with the School Administration.
Activities:
1. Prepare and submit a detailed plan of summer program activities to your administration.
2. Prepare and submit a weekly (or monthly) report of all summer activities completed to your administrator. Take the time to explain your activities and to answer any questions concerning your activities or plans.

GOAL XIII
Develop a Public Relations Plan for the Vocational Agriculture Program.
Activities:
1. Develop and distribute publicity materials for summer vo-ag and FFA activities (assist chapter reporter on FFA publicity).
2. Develop a PR plan for the vo-ag and FFA activities scheduled for the coming year.
3. Develop new public relations, contacts (news media, Chamber of Commerce, service organizations, etc.)

GOAL XIV
Complete Planned Professional Improvement Activities.
Activities:
1. Attend district/region planned summer vo-ag teacher workshops.
2. Attend university workshops and/or complete occupational experiences appropriate to professional or technical needs.
3. Complete coursework necessary for terminal level certification and/or Master's degree.
4. Take an active role in your state called vo-ag teachers summer conference.

GOAL XV
Expedite Completion of Vocational Agriculture Facility Renovations and Maintenance.
Activities:
1. Complete safety inspections (and related records) on all vo-ag machinery and equipment.
2. Expedite replacements, repairs or renovations on vo-ag equipment or facilities.
Note: Routine maintenance should be completed by the maintenance staff, not by the vo-ag teacher. As a paid professional, all GOALS listed above should take precedence over "maintenance duty." Give input to the maintenance staff and let them do their job.

GOAL XVI
Plan and Take a Vacation.
Activities:
1. Schedule vacation time such that it is most compatible with program activities.
2. In multiple instructor departments, stagger the vacations such that at least one instructor is always on duty.
3. Avoid having the program unattended for longer than 2 weeks.
Note: Substitutes can be used effectively in summer programs *if* activities are well planned.
4. Get away from the program for 2 weeks and enjoy your family and avocational interests to the fullest.

The above goals and activities should provide some basis for planning a summer program of work for any local vo-ag program. The next question that arises is: Can one instructor tackle *all* 16 of the above goals in one summer? Certainly, all of the above goals should be given at least cursory attention each summer. Goals I through IV should be given considerable attention every summer in order to maintain a quality program. Beyond these major activities the instructor may do well, however, to select two or three goals to which major effort would be given during a given summer. The net result is that an instructor's summer program of activities may look quite different from one summer to the next.

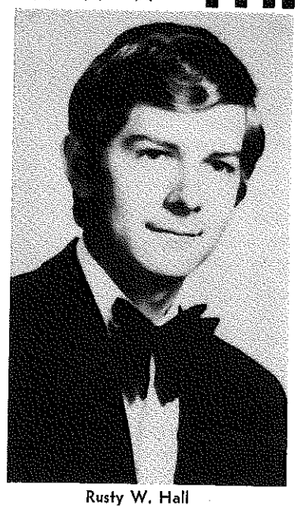
It is a certainty that the quality of vocational agriculture training will suffer if strong summer programs are allowed to lapse. These programs can be maintained if instructors are willing to *commit to paper a detailed and justifiable* summer program of activity. Once the program is approved, the instructor must be equally committed to carrying out the plan effectively. With planning, justification, and commitment to productive activity, summer programs will continue to be a viable component of vocational agriculture education. ◆◆◆

Note: This article is condensed from a more detailed publication, *Defending Summer Vocational Agriculture Programs*. Single copies may be requested from Dr. John D. Oades (Department of Agricultural Education, Oregon State University, Corvallis, Oregon 97331).

★ ★ ★ THIS WORKED FOR ME! ★ ★ ★

AGRICULTURAL DEPARTMENT REPORTS AND ACTIVITIES NOTEBOOK

by
Rusty W. Hall
Vo-Ag Teacher
Stafford Sr. High
Fredericksburg, VA



Rusty W. Hall

In this day of justification, unemployment, and budget cuts it has become necessary to sell yourself and your program as never before. Public relations with fellow teachers, administrators, and county officials has always been imperative to quality agricultural and FFA programs, but now it's a necessity. Each year we fight a battle over teacher needs, salaries, class loads, and extended contracts. Teachers often face budget cuts, rises in the cost of living, increased classroom loads, and fewer extended contracts. Another problem involves the time required by administrators for homeroom, hall, bus, and/or cafeteria duties, and class sponsorships. Time required for an effective job with departmental and FFA activities alone is vast. How do you make an administrator aware of your activities and achievements?

Some administrators are aware of some of the duties and responsibilities you undertake and area supervisors provide support. However, demonstrating the success in meeting program goals is primarily yours. One method that I have used is the development of a notebook to explain activities and achievements to school and county personnel and to organize important materials. A three-ring notebook entitled "Agricultural Department Reports and Activities Notebook" was put together as an aid in the justification of my program and for time requests.

THE NOTEBOOK

At the front of the notebook is the schedule of reports due to the area supervisors office. The notebook is then divided into twelve sections, one for each calendar month. As an example, for the month of September the notebook contains copies of the following forms (number needed of each noted): Annual Program of Agricultural Education, Vocational Education Monthly Plan and Report, Activities and Travel, Plans for Adult Supplement Activities, and Virginia Vocational Education Student Enrollment; for November such forms as: Teaching Calendars, Monthly Report, and various Young Farmer applications — Young Farmer Family, Farm and Home Safety, Final Association Report, and Corn Growing contest; and for April: State and American Farmer Degree Applications, Holiday Lake Forestry Camp entries, Monthly Plan, Final Chapter Report, Chapter Award, Chapter Safety, and proficiency and foundation award applications. In the back is a list of FFA activities and a mixture of forms used at various times such as field trip applications, professional meeting attendance request, pay vouchers, requisition forms, and cooperative work experience planning forms.

This idea will not guarantee you less duties and an extended contract, but when combined with other methods such as personal contracts, proper use of radio and newspapers, and taking time to explain travel reports and teacher calendars, the justification battle may already be half won. Such a notebook can be an asset to any program with a little work and organization. ◆◆◆

SOIL FERTILITY AND FERTILIZERS, by Tisdale & Nelson, New York, NY: McMillian Publishing Co., Inc. (1975), Third Edition, 694 pp., $16.25

Beginning with a convincing introduction, Fertilizers in a Changing World, the third edition of *Soils Fertility and Fertilizers* presents the fundamentals of soil fertility and fertilizers manufacturing. The authors begin with general history and theory of accepted fertility trends. The authors move to the more complex action exchange and micronutrient availability theories. Throughout, examples and common sense approaches to understanding are used. The elements are discussed not merely by themselves, but, as they are in the soil, in compatibility with other soil entities. The central theme throughout is the search for full production of food and fiber for an exploding world population.

Special efforts are made to stress input-output economics of crop production. The authors always link economics and farming practices for best results. Much updating is apparent where recent charts, data, and examples are given. Lengthy detail is given to fertilizer manufacturing, mixing, and distribution and recent innovation in pesticide fertilizer mixtures, chelates frits, and fertility tests. Common sense soil management, cropping systems, and water are covered in meaningful terms.

Each chapter ends with a summary discussion list of pertinent areas covered plus a list of questions for querying the reader or student's recall of facts. Selected references listed at each chapter's end shows extensive depth of research.

Samuel C. Tisdale is Vice President of the Sulpher Institute and formerly Professor of Soils at North Carolina State University. Werner L. Nelson is Senior Vice President of the Potash Institute of North America and formerly Professor of Agronomy at North Carolina State University. This is the third edition of their original book. Significant updating of fertilizer manufacturing methods and liming practices is evident. Experimental research data have been updated to stress the economics of input-output.

The book is written assuming a basic agronomy and soils knowledge. The book reading level is above high school. The book would be excellent text for college junior level and/or in advanced post secondary technical education curricula dealing with soil fertility and fertilizers. The book would serve as a convenient reference for any agriculture department. For personal reading, this book as reference material is high caliber.

A. R. Clarke
Area III Vocational Center
Myrtle Beach, SC

Leader in Agricultural Education:

L. M. HARGRAVE

by
Jerry Stockton

"If you beat him, get ready to tell him how and why." This statement exemplifies the competitive attitude and quest for excellence identifying Professor L. M. Hargrave.

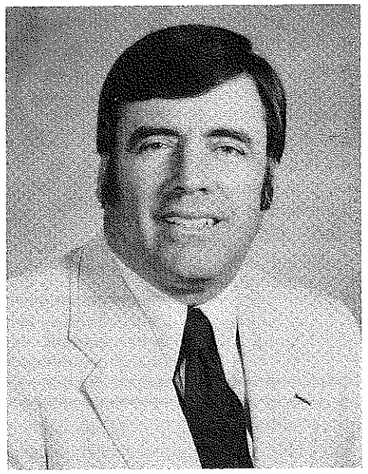
L. M. was born November 23, 1911, at Robert Lee, Texas. His family moved to Kress, Texas, in 1923, continuing in farming. L. M.'s early involvement in stock shows began as a steer exhibitor at Kress. His story of riding with a train-load of steers to the Fort Worth Livestock Show delights those privileged to hear his forthright analysis of that early adventure.

Mr. Hargrave received his B.S. degree from Texas Tech and began his distinguished teaching career at Frenship High School, Wolfforth, Texas, in 1935. He taught for eleven years at Frenship, and received his Master's degree from Texas Tech in 1942. His high school teaching was noted for excellence and competitiveness. He produced twenty-two Lone Star Farmers and four American Farmers in eleven years. He was noted for winning leadership and judging teams. Mr. Hargrave commanded respect in the show ring, especially barrows, by exhibiting grand champions on several occasions.

It was not difficult for L. M. and his lovely wife, Ruth, to make the transition from high school to a university agricultural education program. L. M. immediately began an energetic Collegiate FFA program, as well as plunging directly into supervision of area and state leadership and judging contests.

L. M. was known as the teacher's friend. His dedication to the development of the supervised farming program in Texas left an indelible impression on Texas Vocational Agriculture Teachers. Professor Hargrave has developed essentially all the leadership training materials for Areas I, II, and IV of Texas for fifteen years. He developed parliamentary procedure workbooks and FFA Manual workbooks that are purchased and consumed in twenty-four states. The workbook development was a labor of love, as he believes leadership training to be basic to a student's learning process.

The youth of Texas identify with L. M. because of his concerted efforts with regard to youth leadership training, stock shows, and judging contests. He developed a format for leadership training schools for interested high school students now being used extensively in Texas. Young FFA members look to L. M. for direction regarding livestock shows, as he has been superintendent of the Barrow division of the State Fair of Texas for twenty-seven years, San Antonio for four years, and Houston for six years. Houston alone has 2,100 barrow entries, and each student can enter only one animal; thus, his philosophy is exposed to many young people each year. Additional interaction with youth was afforded at the Texas Tech University Judging Contest, where L. M. served as General Superintendent for thirteen years. In addition, he served as Assistant General Superintendent of the Southwestern Livestock Show for twenty-seven years. He served as Chairman of the Texas Public Speaking Contest for five years, as well as judge of the Western Region Public Speaking Contest at the National FFA Convention. He judged numerous swine shows in Texas, and his selections were respected by those observing his judging. Mr. Hargrave also serves as superintendent of the educational exhibits at the Panhandle South Plains Fair.



Jerry Stockton

Jerry Stockton is Associate Professor at Texas Tech University, Lubbock, TX.

Honors and awards Professor Hargrave received include Honorary State Farmer of Texas, Outstanding Teacher Educator in Texas, distinguished service to Texas Young Farmers, distinguished service awards for outstanding service to vocational agriculture students in Texas, the Gerald Thomas Outstanding Agriculturalist Award, and Honorary American Farmer Degree.

The Texas Young Farmers would be hard pressed to conduct their State Awards Selection Meeting without L. M.'s presence. He assisted in the development of the guidelines for selection of the various awards, and he has worked ten years helping select state recipients. His integrity regarding all phases of agriculture is well-known and respected.

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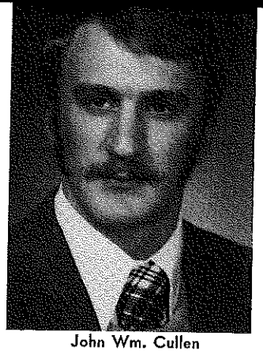
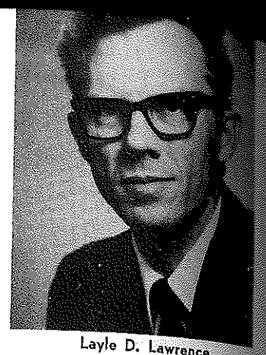


John Wm. Cullen

PARENTS' EVALUATION OF THE VO-AG PROGRAM

by
John Wm. Cullen, Jr.
Vo-Ag Teacher
North Iredell High School
Olin, NC

and
Layle D. Lawrence
Teacher Education
West Virginia University



Layle D. Lawrence

If your vocational agriculture program were to be evaluated by parents of your students, what kind of rating would you receive? Would parents say, "My sons have an excellent vo-ag teacher. He takes pride and interest in all students and their work, and is always willing to help them. The things they learn are certainly going to be helpful to them in the future."? Or would they be more likely to respond "The instructor needs to make home visits and take a personal interest in each student."? These are verbatim comments made by parents of third-year vocational agriculture students in a recent West Virginia survey. Happily, there were more comments similar to the former than the latter.

To obtain data for the study, a random sample of 220 parents of third-year vocational agriculture students attending schools in West Virginia during the 1976-77 school year were mailed survey forms. Two reminder letters were sent to nonrespondents. Subsequently, 90 usable questionnaires (40.9 percent) were returned and subjected to analysis.

OVERALL PROGRAM

Most parents (85.5 percent) expressed satisfaction with their local vocational agriculture program and 92.2 percent agreed that subjects studied would be useful to their children (see Table). A high percentage of parents also agreed that FFA activities are a valuable part of the educational program. Approximately 85 percent felt that variety and content of classroom and shop instruction were good, however, parents were less enthusiastic about the adequacy of classroom and shop facilities, reference materials, shop tools, and laboratory equipment.

OCCUPATIONAL COMPETENCIES

Regarding occupational competencies acquired in vocational agriculture, nearly 2/3 of the parents believed skills learned would prepare their child for farming; 56.6 percent thought their child would be prepared for an off-farm agricultural job; and 41.1 percent believed their child had acquired skills which would prepare him for further education in agriculture. In each case, a relatively large percentage of parents was undecided.

SUPERVISION

Only two-thirds of the parents agreed that supervision of students by the vo-ag instructor was adequate. Parental disappointment in this area is understandable as 24.4 percent claimed their child had not received supervisory visits during the past year and another 18.9 percent said the teacher had made a single visit to supervise their child's occupational experience program. This observation should be of great concern to teachers who neglect this fundamental aspect of vocational agriculture.

Parental Opinions of Vocational Agriculture

Statements	Opinion: Agree No.	Agree %	Disagree No.	Disagree %	Undecided No.	Undecided %
1. I am satisfied with my child's vo-ag program	77	85.5	8	8.9	5	5.6
2. Subjects in vo-ag will be useful to my child	83	92.2	2	2.2	5	5.6
3. FFA activities in the program are valuable to my child	82	91.1	1	1.1	7	7.8
4. My child receives adequate supervision from the instructor	60	66.6	14	15.6	16	17.8
5. My child has developed his experience program to the best of his ability	74	82.3	4	4.4	12	13.3
6. FFA has developed my child's leadership abilities	72	80.0	4	4.4	14	15.6
7. The vo-ag department has adequate:						
a) Classroom facilities	75	83.3	8	8.9	7	7.8
b) Shop facilities	68	75.6	16	17.8	6	6.6
c) Shop tools	57	63.4	22	24.4	11	12.2
d) Books and magazines	71	78.9	7	7.8	12	13.3
e) Lab instruments	32	35.6	33	36.7	25	27.7
8. Vo-Ag has taught my child skills in preparation for:						
a) A farm job after graduation	59	65.6	10	11.1	21	23.3
b) A nonfarm agricultural job	51	56.6	7	7.8	32	35.6
c) Enrolling in an agricultural college	37	41.1	13	14.4	40	43.5
9. Variety and content of classroom instruction is good	75	83.4	6	6.6	9	10.0
10. Variety and content of shop instruction is good	77	85.6	5	5.5	8	8.9
11. The total vo-ag program is excellent	52	57.2	11	12.2	27	30.0

There is no substitute for supervisory visits in the development of worthwhile and successful occupational experience programs or in promoting desirable relationships with parents and students.

When parental opinions were analyzed according to number of supervisory visits made, invariably attitudes were more favorable to various aspects of vocational agriculture as numbers of supervisory visits increased.

(Concluded on page 23)

A VO-AG TEACHER'S VISIT TO INDIA

by
Jim Honey
Vo. Ag. Instructor
Carthage, MO

More than 700 million people populate an area half the size of the U.S. Six and one half million people inhabit Bombay — two and one half million who have no shelter. The population of Bombay grows by an estimated 650 people per day. This is characteristic of a country that I had the privilege of visiting for one month in January, 1976.

I was part of a group exchange program of six men from Missouri, Arkansas, Oklahoma and Kansas who exchanged with Rotary District 306 in India. We were in the states of Madhya, Pradesh and Gujarat of India.

THE TAXES

Although our stay in India was relatively short, certain observations led us to conclude that the pending social problems and the frustrations have the tendency to create several dangerous trends in social structure. For example, less than one percent of the population of India pays taxes. The government, however, must provide for the masses and continues to increase the tax burden to a level where 95% corporate and personal taxes are not uncommon. Sur taxes, wealth taxes, maximum income levels, international travel restrictions, strict licensing regulations and other miscellaneous rules only add to the frustration. Rather than promote growth and expansion, these regulations tend to encourage restraint and constriction.

PLANNING

Long range planning is replaced by short term quick turnover investment. As a result, many students who are fortunate to receive their education in Europe or the U.S., and who formerly returned to India to contribute and make use of their knowledge, are now more and more attracted to the potentials of the western countries and are not returning.

DIFFERENCES

Another interesting facet was the craftsmanship of hand labor which was predominant throughout our travels, because labor is cheap and great numbers of people are seeking employment.

We saw the beautiful craftsmanship in wood, leather, ivory, stoneware, silver, and brass, and the beautiful paintings, carvings, and inlaids all representative of ancient traditions and cultures. Every day introduced new social and cultural contrasts to our own traditions.

Our two party political system was compared to their confusing system of more than 12 political parties. Our assumption that the country has one language which may have several dialects was challenged by the awesome fact that more than 10 different and individually distinct languages are currently isolated to each of the sections of the Indian country. More than a dozen religions, ancient and modern, are influential within Indian society. Communications and education therefore becomes a task of tremendous proportions. However, no matter where we went, hospitality, true hospitality, the likes of which we had never experienced, was overwhelming on a daily basis.

THE GOOD AND THE BAD

The subject of food always created tremendous interest since the basic Indian diet is vegetarian. Meat was available in unpredictable quantities and qualities. India is not a customary tourist stopover for the western traveler. India is a hard country — hard to a westerner ignorant to the realities of hunger, poverty and ignorance. Not all of our experiences were good ones, and tremendous credit must be given to our Indian hosts for their unselfish efforts to shield us from unpleasantries.

We were there to see as much of India as we could, good or bad. We saw the slums. We saw the luxury hotels, posh homes and the indescribable Taj Mahal. We also saw the poor and deformed street beggars. We saw neighborhood free clinics and modern medical facilities. We also became ill with dysentery and stomach infections.

EDUCATION

Their education is somewhat different in that almost all students study several foreign languages. Many students leave home to attend private schools and live at the schools. The agricultural colleges that I visited were located on university research farms. Most of the college professors I visited had studied in the United States. I was impressed with the research that was taking place during my stay.

JUDGMENT

To judge India at this juncture would be premature, especially by American standards. That is the one thing Indians seem to want from Americans, that we should realize that the American way is not the only solution, and that India must face up to its problems in its own way. ◆◆◆

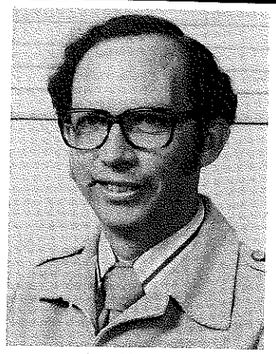
CONTINUED *LEADER*

Former students give testimony to L. M.'s teaching ability. His honesty and quest for excellence always impressed his students. Teaching a common sense, practical approach, along with a genuine personal concern for each individual, solidified his excellent rapport with students. One of the lasting tributes regarding L. M. Hargrave's teaching ability was his selection as Teacher of the Semester representing the College of Agricultural Sciences in his last year of teaching.

L. M. Hargrave has retired from teaching, but he will forever be a positive force through the lives of those he taught. At present, L. M. remains active and interested with a demanding schedule. Professor Emeritus L. M. Hargrave has made his presence known. The truly dedicated seldom pass our way. May we all benefit from his example. ◆◆◆

Technical AG. Competencies Needed By Secondary Students In Latin America

by
*Len Harzman**
E.P.D.A. Fellow
Kansas State University



Len Harzman

In order to increase the food supply and income of farmers in Latin American countries, a well planned and organized program of agriculture education is essential. There are many secondary-level agricultural schools already in operation throughout Latin America which would benefit from an improvement in curricula and teaching methodology. The educational programs should be oriented toward a more practical and applied education in agriculture. Objectives and student competencies need to be identified and used as a basis for developing and implementing a sound agricultural education program.

THE STUDY

The author recently completed a study to identify the technical agriculture competencies needed by secondary students in agriculture education programs in Latin America, with emphasis on Paraguay.[1] Paraguay was chosen as a focal country due to the relationship of the Kansas-Paraguay Partnership in the Partners of the Americas Program. The author was an officer in the Partnership, and has spent time studying agriculture education in Paraguay.

METHODS

Members of a jury of experts were asked to rate 104 technical agriculture competencies in eleven categories according to their importance to students in the secondary-level agricultural schools in Latin America, with em-

(Concluded on next page)

[1]Harzman, Leonard A., "The Identification of Technical Agriculture Competencies For Secondary Students In Agriculture Education Programs In Latin America, With Emphasis On Paraguay," Unpublished Doctoral Dissertation, Kansas State University, Manhattan, Kansas, 1977.

*Dr. Leonard Harzman is currently an Associate Professor of Agriculture Education at California Polytechnic State University, San Luis Obispo, California.

TABLE II

NUMERICAL RANK ORDER OF THE FOURTEEN MOST IMPORTANT COMPETENCY ITEMS

Rank Order	Category	Competency Item	Composite Mean
1.	Agriculture Mechanization	Perform the practices and techniques used in soil conservation	4.54
2.	Agronomy	Perform the techniques of applying the various forms and kinds of fertilizer	4.54
3.	Poultry Science	Apply the management practices and techniques involved in poultry production	4.52
4.	Entomology	Identify insects and pests attacking field crops and describe the methods of control	4.50
5.	Animal	Apply the nutritional principles and fundamentals of livestock feeding and ration formulation	4.48
6.	Plant Pathology	Identify common crop diseases and describe methods of control	4.46
7.	Dairy Science	Apply the nutritional principles and fundamentals of dairy cattle nutrition, feeding, and ration formulation	4.43
8.	Poultry Science	Apply the principles of animal agriculture to poultry science and management	4.39
9.	Animal Science	Apply the practices and techniques used in farm animal reproduction	4.39
10.	Entomology	Identify insects and pests attacking livestock and describe methods of control	4.38
11.	Animal Science	Perform the practices and techniques used in beef cattle production	4.30
12.	Agronomy	Apply the soil conservation principles and practices used in soil, water, and wind erosion control	4.30
13.	Agriculture Mechanization	Describe and demonstrate the various operations of crop harvesting and handling systems	4.29
14.	Agronomy	Explain the soil properties and plant processes basic to crop production	4.29

CONTINUED *TECHNICAL AG COMPETENCIES . . .*

phasis on Paraguay. Six individuals from each of four groups: Government Technical Assistance Administrators, Land-Grant University Faculty, Paraguayan Agriculture Teachers, and Lay Volunteers, formed four sub-juries and combined to form the total jury.

The jury members rated the 104 competencies on a Likert type of scale which consisted of: 5 = essential, 4 = very important, 3 = of some importance, 2 = of little importance, and 1 = not needed. The computer analysis of the data was performed by using mean scores, the Analysis of Variance, and Tukey's Multiple Comparisons statistical procedures.

No significant differences (.05 level) were found between the jury members for the eleven categories. However, significant differences (.05 level) were found on 7 of the 104 competency items, indicating a close agreement among the jury members. For 5 of the items where significant differences occurred, the Paraguayan agriculture teachers disagreed with the other three sub-juries.

FINDINGS

The findings of this study revealed that there was a large degree of agreement as to the levels of importance for the competency items and categories by the members of the four sub-juries. The jury members rated the eleven categories of technical agriculture by composite mean scores as shown in Table I.

TABLE I
TECHNICAL AGRICULTURE CATEGORIES

Very Important (4.0 - 4.99)	
	Poultry Science (4.15)
Of Some Importance (3.0 - 3.99)	
	Plant Pathology (3.96)
	Entomology (3.95)
	Agronomy (3.88)
	Agriculture Mechanization (3.77)
	Agriculture Economics (3.57)
	Dairy Science (3.56)
	Animal Science (3.52)
	General Agriculture (3.22)
	Horticulture (3.12)
Of Little Importance (2.0 - 2.99)	
	Grain Science (2.96)

The top 14 competencies are given in Table II, as rated by the jury of experts. There were 30 of the 104 competencies which received "very important" ratings, 56 "of some importance," and the remaining 18 "of little importance." There were 65 competencies in the opinionaire that received a rating of 3.50 or higher. It did appear that the jury members placed a higher rating on the applied competencies than on the theory competencies.

SUMMARY

It was anticipated that this study would assist the agriculture teachers in Paraguay by providing a basis on which to develop an improved agriculture education curriculum. Improvement would come about through the revision and adaptation of the existing curriculum to more effectively meet the identified competency needs of the students. The findings should also be used as a guide in developing and implementing pre-service and in-service agriculture teacher education programs in Latin American countries such as Paraguay. ◆◆◆

CONTINUED *PARENTS' EVALUATION . . .*

INSTRUCTIONAL EMPHASIS

With few exceptions, parents considered teachers to be giving proper instructional emphasis to the diversity of agricultural subject matter areas. In general, parents who participated in the study would like to see more emphasis given to fruit production, forestry, and processing of agricultural products. In addition, they indicated concern regarding most phases of agricultural mechanics. To some extent, this concern may be related to dissatisfaction voiced regarding adequacy of facilities and equipment.

SUMMARY

Opinions and attitudes of parents are important. These are people who shape attitudes of students, pay taxes which make vo-ag possible, and influence members of boards of education with regard to moral and financial support and even continuance or discontinuance of programs. Their cooperation is essential if vocational agriculture is to succeed. Thus, it is vital that vocational agriculture programs and activities be planned and conducted with due consideration given to parental views and attitudes. ◆◆◆

BEEF CATTLE, by A. L. Neumann. New York: John Wiley & Sons, 1977, Seventh Edition, 883 pp., $18.95.

Once again, the continuing editions of BEEF CATTLE stand at the head of the class for excellence in beef sciences, with particular emphasis in this edition on analyzing the factors affecting costs incurred in producing beef cattle. Neumann accomplishes this through his unique writing style and organization of materials into six distinct topics. Beginning with an overall look at beef cattle enterprises, Neumann introduces you to the many specialized programs of production and geographic regions in which they are practiced. Then he immediately plunges into the major economic factors surrounding the production of beef cattle.

With the above background firmly laid in the reader's mind, a comprehensive and thoroughly readable discussion of breeding, reproduction, and feeding completes the foundation for the book. Included in this particular section are many results of testing and research papers which Neumann uses quite effectively in validating his views.

From here the book concentrates on a thorough step-by-step examination and discussion on the major programs of beef production. Entire sections are headed: The Commercial Cow-Calf Program; The Stocker and Finishing Programs; and, Specialized Beef Cattle Programs. The book concludes with a very well thought out section on the many special problems associated with beef production.

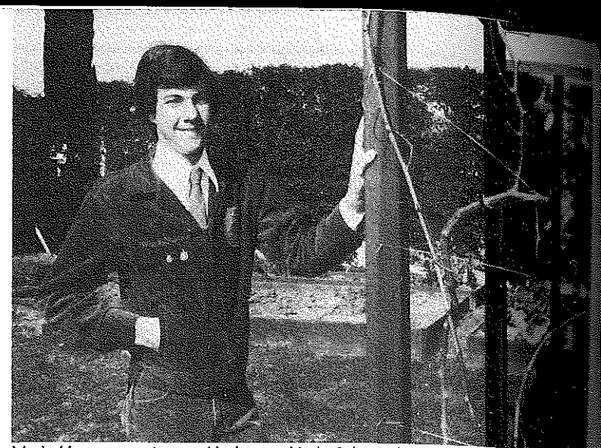
Neumann is well qualified to tackle his writing task. From his raising on a livestock farm to his Ph.D. in Animal Nutrition and Physiology, Neuman has had a continuous love affair with the animal sciences. His expertise even led to his being elected to the Animal Science Department Hall of Fame at Oklahoma State University.

With all his experiences as teacher, lecturer, and writer to draw on, Neumann does an admirable job of compiling complicated and confusing materials into a very easy to read text. I would recommend that this book be on every ag teacher's reference shelf. As a source of information it is hard to beat. I think that the main thrust of the text is definitely aimed at post-secondary students in that the material is research oriented. However, high school departments with specialized courses in beef cattle science should seriously consider this a valuable investment for text purposes. Incidentally, the informed beef cattle farmer would be wise to have a copy on his shelf at home.

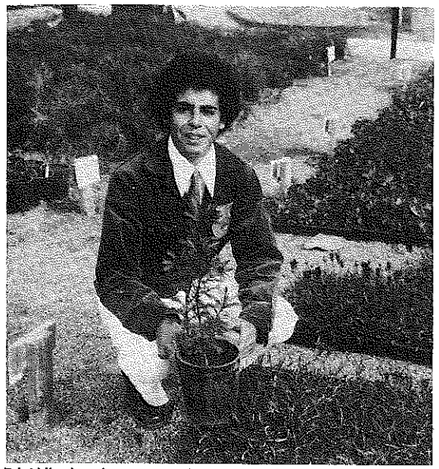
Paige M. Henry
Laurel Senior High School
Agriculture Department
Laurel, Delaware

STORIES IN PICTURES

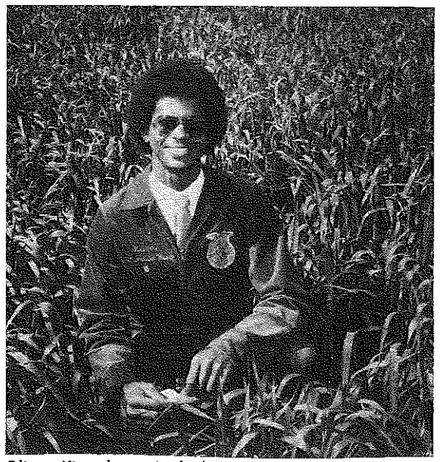
by
Joe
Sabol



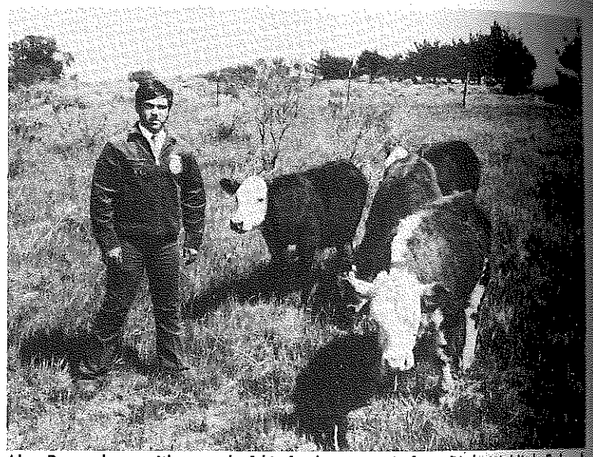
Mark Horn, a senior at Narbonne High School, has as his SOEP a backyard garden where he raises many varieties of exotic plants that he has collected worldwide. He also has a cooperative management training program with a local nursery as a portion of his SOEP. Mark's teachers are Clarence Mann and Jim Gabriel.



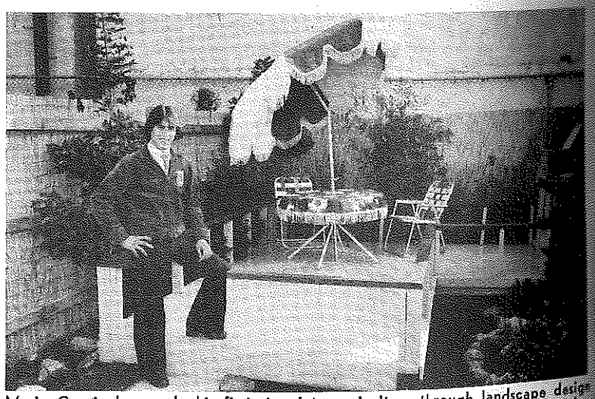
Ed Villa has been actively involved in occupation experience programs during his entire high school career. He has been manager of the FFA swine unit, developed an outstanding horticultural project, and is an apprentice in meat cutting in Westminster, CA.



Oliver King has raised this crop of green chop feed to be consumed by his lambs and beef project. He is a senior at Gardena High School where his teachers are Theodore Weber and Sharon Stratton.



Alan Doan, shown with several of his feeder steers, is from Righetti High School. He has as his supervised occupational experience program feeder calves, show steers, work experience in a meat processing plant and work experience on a local farm. His vocational agriculture teachers are Delvert Clement, Stanley Rose and Joe Nunez.



Mario Garcia has made his first step into agriculture through landscape design and construction. He was a winner in the local project competition and has since broadened his experience program by working with the K-Mart stores in their gardening and plant department. Mario's vocational agriculture teacher is A. J. Arscott, who advises Mario in his duties as Vice President of the Bell FFA. (Photos courtesy Richard Tolbert, Anaheim, CA, and Dr. Jay Lark, Cal Poly at Pomona, CA)

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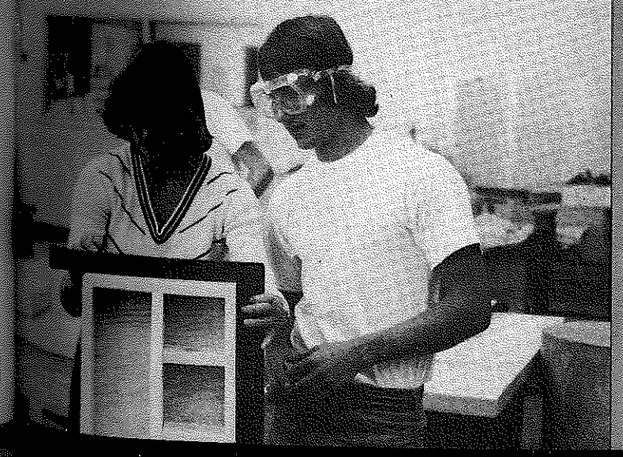

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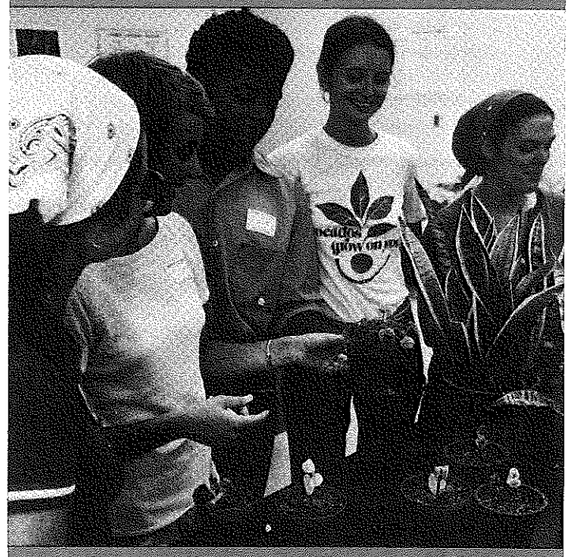

Theme—
Teacher Education in Agriculture—Laying The Foundation For Good Teaching