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Teaming Up: Agricultural Education and Cooperative Extension

Professional Preparation Strategies
Cooperation Between 4-H and FFA
Team Approaches to Programming

THE
AGRICULTURAL EDUCATION
MAGAZINE

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GUEST EDITORIAL

Agricultural Education and Cooperative Extension — Teaming Up!!??

BY JIMMY OSBORNE

Mr. Osborne is agriculture/4-H agent and unit director of the Grayson County Cooperative Extension Service, Independence, VA.

Is this a new concept that has just recently evolved or has this been actively taking place for years? Should this philosophy even be considered rational thinking? As you answer these questions, there is yet one more question that must be addressed. Are the goals for cooperative extension and agricultural education compatible?

I present my opinions today with experience from both sides of the picture, having been an FFA member and having completed 21 years with cooperative extension. Also, my brother is a faculty member in agricultural education at the University of Illinois. I grew up on a farm in Grayson County, Virginia, with a brother and two sisters. We raised cattle, sheep and hogs; milked dairy cattle; and even had a few chickens. This opportunity was priceless to me. Early in life I decided I likewise wanted to be involved in agriculture and farming when I grew up. I was never in 4-H when I was growing up because of a band schedule conflict that prevented me from attending 4-H meetings. Agricultural education in high school touched my life first as I became interested in showing livestock with some of my FFA friends. FFA helped me develop leadership skills by serving as chapter president my senior year of high school and enjoying leadership opportunities. Livestock, dairy, and forestry judging programs offered me the chance to improve my decision-making skills, and classroom and lab exercises strengthened my knowledge and application level, helping me to achieve my personal goals.

But one of FFA's most useful experiences was a teamwork approach involving our FFA chapter and the local Extension Service. Our chapter members, along with our agriculture teachers and county agent, would go to farms in the county to conduct demonstration projects by helping farmers utilize the various cattle identification options available. Our chapter's members provided the manpower to work the cattle through chutes to eartag, tattoo, or freeze-brand as needed. Each member had a specific task to do, and we worked closely as a team under the supervision of our advisors and county agent. As a matter of fact, our sheep shearing schools, livestock showing experiences, and some of our classroom instructional time had both agricultural education and cooperative extension joining forces to produce the best results possible.

So what were my agriculture teachers and the county agents' goals? They were to help young people move from one point in life to a higher plane through progressive, positive influences of change. Then why don't we see this teaming-up approach working throughout our country? I believe it is because either extension agents and/or agriculture instructors sometimes have the wrong goals! They have selfish goals that break down teamwork approaches. The goals I have sometimes seen (but not in the section of the country where I live) are ones of "being the winner at any cost, working hard just to make sure 4-H gets the most mileage and recognition from the students and vice-versa," or "using the other folks for my personal achievement." None of these goals addresses what we've done to better prepare youth for their next station in life.

You can compare the teacher/agent relationship to a marriage — if the goals aren't compatible and jointly beneficial to both, if neither is willing to give a little extra to make things work, and if both parties aren't actively involved in a unified effort, then the result is usually a divorce. And who suffers the most in a divorce? The children do! Likewise, if cooperative extension and agricultural education personnel, as educators, don't bond together, it's the students that suffer the greatest loss.

I have enjoyed a tremendously positive working relationship with agriculture instructors in each of the counties I have worked, and I have shared the joy of seeing students step to higher ground as a result. Some of these experiences have included judging team practices, grafting schools, pesticide training, field days, and interdepartmental contests and programs, to mention just a few.

My challenge to all extension agents and agriculture teachers is to re-think your goals and to make sure that you're benefiting the students. Then work together as a team to make sure those positive experiences keep happening. ■

Similarities and Differences

BY JULIA A. GAMON

Dr. Gamon is an associate professor of agricultural education at Iowa State University, Ames.

This issue is dedicated to encouraging more dialogue and joint efforts between teaching and extension. It is an important theme to me because of my experiences in both areas. After almost ten years on the faculty of the Iowa State University Department of Agricultural Education and Studies, I have strong interest in the high school and community college agriculture programs in our state. My main contacts with teachers are through coordination of the instructor summer packet of instructional materials and in making arrangements for college students to do week-long early experiences in schools. For a number of years I coordinated inservice days and helped with visits to student teachers. All of these experiences helped me appreciate the long hours, hectic schedules, and student involvement that are associated with teaching agriculture.

I also have strong ties to extension programs. Before I joined the faculty, I was a county 4-H agent for ten years and then served four years on the state 4-H staff. My teaching responsibilities and research topics have all been related to extension and evaluation of extension programs.

In comparing the two, agriculture teaching and Cooperative Extension (CES), thoughts turn immediately to the youth groups involved — FFA with teaching, and 4-H with CES. In Iowa last year, most of the participants in the Youth and 4-H program were 10 to 12 years old, and there were fewer males (47%) than females. Over 165,000 had participated; about 35,000 were members of community clubs (Youth and 4-H Statistical, State 4-H Office, VI 6113-CM). In contrast, Iowa FFA members numbered over 9,000, and there were many more males (82%) than females (National FFA Membership Report, 1993). The 4-H program, because of this historic inclusion of home economics, has a broad array of non-agricultural projects and a strong emphasis on the completion of projects. In contrast, agriculture, although not necessarily production agriculture, is an integral part of Supervised Agricultural Experience (SAE) Programs, and the importance of these seems to be declining.

How do FFA and 4-H compare content-wise? Both programs are trying to shed some past images, whether of "cooking and sewing" or "cows, sows, plows." Both are interested in computers, careers, and the sciences. Both enjoy private support, name recognition, and strong family support. The school agriculture programs have more time on task, older students, and grades. The CES programs have more direct access to the resources of university research and to member and leader project manuals developed by specialists.

How do the two programs compare in their contests? FFA contests seem to go on all year, from subdistrict to state, from new members to American FFA degree and proficiency awards, plus county and state fairs. Every year seems to bring another new contest. The 4-H program is also heavily contest oriented. Record books are one aspect; judging contests and county and state fairs are another. Often there are other contests as well, such as presentations, working exhibits, and Share-the-Fun.

Both groups continue to emphasize what has been important from their very beginnings: leadership, citizenship, and learning by doing. In both groups, older youth serve as role models for younger, and one or more adults, whether advisors, leaders, or agents, play an important role in the lives of participants. The table on the following page lists some of the similarities and differences in 4-H and FFA.

What are the barriers and conflicts between FFA and 4-H? The main ones seem to occur during judging contests and livestock exhibiting or when personality conflicts exist between the adults. Sometimes youth are forced to choose one or the other. Regulations and rules may be written or enforced in ways that make it easy and profitable for cheating to occur, instead of making honesty more rewarding.

Both groups face problems in the future; some of these are competition for limited resources, an increasingly urban population, student jobs, decreased family support, overcrowded school schedules, overcrowded student schedules, summer athletic programs, and a decreased need for traditional skills. Urbanization and school consolidations may affect FFA more, while decreased family support may be a greater problem for 4-H.

A number of the articles in this issue stress cooperation between the programs. In addition to FFA and 4-H programs, adult and postsecondary programs provide opportunities for cooperation. CES has resources that can be used by school-sponsored programs and is anxious for them to be more widely disseminated. State and field CES specialists can deliver the program content if teachers can deliver the → audience and the arrangements. Teachers can follow through with local advice for implementation of ideas presented by CES specialists. Postsecondary, as well as high school teachers, can find that teaming up with CES will result in up-to-date research information in publications, computer programs, videos, and other materials useful for class projects.

More cooperation and complementary activities, especially a sharing of resources and ideas at local levels, will benefit both programs. Some people suggest a merger of the two programs. This seems impractical because the agricultural part of 4-H is small compared to its total program. Also, a number of youth enjoy the opportunity to excel in both programs. What is needed is decreasing the barriers and conflicts, particularly those related to fairs and contests.

Similarities and Differences between 4-H and FFA

Item	4-H	FFA
Age	Mainly 9-11	Mainly 15-18
Sex	More females	More males
Delivery modes	Clubs, short-term groups	School classes
Contests	Many	Many
Awards	Many	Many
Written records	Record books	Proficiency records
Adults	Volunteer leaders, 4-H agent, extension para-professionals, parents/ guardians	Advisor (agriculture teacher), parents/ guardians
Younger age efforts	School enrichment programs, day camps, clover buds	Ag in the Classroom, agricultural literacy, PALS
International programs	IFYE and other programs	WEA and WASS (Work Experience Abroad and World Agri-Science Study)
Community service	Citizenship projects and programs	BOAC
Washington Week	Citizenship Washington Focus	Washington Conference Program
Local resource	County Extension office	School
Advisory group	4-H Committee	Advisory Council
Dues	Little or none	Yes
County/state fair exhibits	Livestock, Home Economics, and others	Mainly livestock ■

About the Cover . . .

Jennifer Pierson, a senior in agricultural education at Iowa State University, was an award winner in FFA and 4-H.

Preparing Agriculture Teachers and Extension Agents

BY BRENDA SEEVERS

Dr. Seevers is an assistant professor of agricultural education at New Mexico State University, Las Cruces.

Introduction

A new millennium — the year 2000! Will you be prepared to meet the challenges it brings? Where were you 10 years ago? Ask yourself, "What changes have occurred in social, economic, political, educational, and cultural conditions in the past 10 years?" Now consider what impact those changes have had in your career development and employment as an agricultural educator.

Rapid societal changes have had an impact not only on individuals and families, but also in the workplace. New areas for employment and careers have evolved, and traditional areas of employment have expanded or changed to meet society's needs and concerns. Departments of Agricultural and Extension Education desiring to remain viable have restructured to accept the challenge of preparing students to meet these workplace and societal challenges.

New career opportunities abound within these restructured programs for students enrolled in agricultural and extension education. New degree options in agricultural communications and agricultural industry have been added to traditional degree options for secondary school teaching and work in cooperative extension. Undergraduate and graduate programs have expanded to address issues and concerns in global agricultural development, technology and education, resources management, including working with volunteer programs, and grant writing. Students from hospitality and tourism are interested in economic development and promoting products made or grown within their state, and interest in international agriculture has increased, though the impact of NAFTA on this career opportunity has yet to be realized.

This transformation has also affected students pursuing careers as an agriculture teacher or cooperative extension agent. The successful teacher or agent of the 1990s or the next millennium requires skills in addition to those of his or her mentor. It is the role of agricultural and extension education to anticipate these needs and prepare students for the challenges of the future. In order to thrive as well as survive, a proactive and progressive approach is required.

Competencies for Tomorrow

Agriculture teachers and CES educators will need to work closely with communities, business and industry, government agencies, and others in order to remain on the cutting edge. Providing excellence in programs to clientele is directly related to the competencies possessed by the faculty or staff administering them. The term "being educated" no longer describes a person who has completed study in a given area or areas, but instead refers to the process of obtaining knowledge, skill, ability, or behavior change.

Undergraduate students in agricultural and extension education at New Mexico State University may choose from several degree options, including teacher education, extension education, agricultural business and industry, agricultural communications, and applied technology education. Each degree option requires a high percentage of credit hours in technical subject matter areas from several different disciplines. Professional development courses, however, focus on the humanistic side of being an educator. Classes in teaching methods and leadership address more than teaching techniques and strategies. They deal with the student or client as a person; how to create not only a positive physical environment, but also a positive psychological environment for learning; interpersonal communication skills, including conflict resolution; legal issues in education, including equal opportunity, harassment, and discipline; networking and resource development; and working with multicultural and diverse audiences. In all instances, however, the principles of teaching and learning as lifelong processes are utilized to prepare the student for roles an an educator or agriculturalist, and beyond.

Linking Theory with Practice

Instruction in agricultural and extension education strives to put relevance and meaning to key concepts through practice and application. Some of the unique opportunities for NMSU students are described below.

a. Directed Field Experience. All students enrolled in agricultural and extension education at New Mexico State University complete at least two directed field experiences or internships. Degree options in areas other than teaching have only been available in the last year. Prior to that time, all students were involved in an eight-week student teaching component (required by the state for licensure) and a four→

Student teachers help students enrolled in agriculture at the Mesilla Valley Technical Education Center plant Christmas trees. (Photo by Tom Dormody)

week internship in a county extension office. The four week experience is recognized by the state as a legitimate and valuable educational experience. New degree options allow students to choose this combination option or one 12 week experience. Most students recognize their perspective of agricultural education careers is limited and choose a multiple-option field experience. The field experiences are individualized according to each student's degree option and career goals. Most students in the teacher education option, however, still continue to choose a second field experience with CES, although other experiences have included community college teaching, Bureau of Land Management, Soil Conservation District, U.S. Forest Service, and the Mesilla Valley Education Center. Students participating in the directed experience in extension education said, "I worked with all aspects of the CES office. I gained insights into all program areas and how they can work together effectively. I learned a lot from my supervising extension agent that I was unable to learn in class."

Field experiences and internships provide firsthand experiences on the job under the guidance and supervision of a selected mentor. Multiple experiences broaden a student's understanding of career opportunities as an agricultural educator and enhance employment opportunities upon completion. Solid preparation through classroom study and activities is an essential requisite for a successful field experience.

b. Community-based Education. Students in the teacher education option receive a strong orientation to pedagogy. Community education, however, is based more on the adult learner as its primary clientele. Facilitating a successful learning experience for adults necessitates an understanding of adulthood in conjunction with the learning process. Current literature in adult education supports the idea that teaching adults is different from teaching children or adolescents. Undergraduate students receive an orientation to the basic principles of adult education (andragogy), as well as a more comprehensive foundation in pedagogy. Students have the opportunity to incorporate both principles in microteaching assignments during the teaching methods classes.

A specific assignment requires students to work as a group to plan, conduct, and evaluate a three-hour community education workshop. They must design the program for an adult audience and utilize sound program planning principles. This assignment broadens the scope of their teaching experience by planning an extended educational experience, as well as working with an audience that has different ages, characteristics, and motivations for participation.

c. Human Relations. Barrick (1989) said, "Agricultural education can reveal the tie between the technical area of agriculture and the humanistic disciplines. Educating the person as a human must remain the forerunner to educating the person as an agriculturist." Effectively disseminating technical information is not enough. The successful agricultural educator is one who recognizes and respects the unique characteristics and qualities of the clientele being served. Good communications and interpersonal skills are essential. Most students entering our program are not prepared to handle the complex human relation situations they will encounter. Situational analysis, case studies, and role plays based on actual events are utilized to familiarize students with potential situations. These situations deal with conflict issues, cultural and social differences, personality differences, discipline, sexual harassment, and legal, moral, and ethical concerns.

d. Working with Diverse Populations. The word "diversity" usually brings to mind individuals from different ethnic or cultural backgrounds. Diversity, however, has a much broader interpretation that includes but is not limited to age, gender, religion, and physical or mental disabilities. Ethnically, New Mexico is a diverse state with over 50% of the state population being Hispanic or Native American. Most of the students in agricultural and extension education have a high awareness of diversity as it relates to ethnicity and culture; however, a university class on cultural diversity offered through the College of Education is highly recommended as an elective course.

When they enter the program, few students have much experience or knowledge of population groups involving other types of diversity. Today, exceptional students (those who are physically or mentally disadvantaged) are

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Teaching and Extension — Career Paths and Interactions

BY DONNA L. GRAHAM

Dr. Graham is an associate professor of agricultural education at the University of Arkansas, Fayetteville.

I started to work for the Cooperative Extension Service as a county agent. I did not want to teach. I had planned to be a high school teacher but decided to take additional technical subjects instead of the teaching block my senior year. I had developed an interest in extension work after working one summer in a county office. I liked the flexibility and creativity that it allowed, but most of all, I liked how I could manage my own time. I felt the classroom would be too confining, and more importantly, I remembered how I had behaved in high school.

I have never regretted this decision. In fact, I have pursued extension education as a career. (Little did I know that I would teach all of my career.) That is why I am on the faculty of the Agricultural and Extension Education Department today. I want to have a part in training young adults to be extension agents.

I started to work as an assistant county agent — the entry level in extension work, but perhaps the most rewarding. It was at the county level that I got to plan and implement educational programs based upon the needs and interests of the people. There was no set curriculum — no units or modules. I had to be flexible and creative in designing instruction for target audiences by using a variety of methods, such as leader training, club meetings, farm or home visits, demonstrations, workshops, and media presentations. The success of the program depended on my ingenuity, because participation was voluntary.

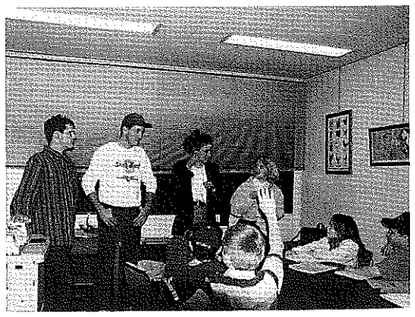
The position I loved the most at the county level was that of a 4-H agent, my second position in CES. The 4-H program depended upon volunteers to maintain the clubs. My job was that of a recruiter, trainer, and motivator of adults and an organizer of community, school, and project clubs and special interest groups. I planned, organized, conducted or evaluated competitive events, educational workshops, camps, and training meetings.

The primary job of training in 4-H consisted of teaching volunteers about subject matter so that they could assist youth in project study. I was either smart or lazy, because I soon learned that if I recruited adults as leaders with the skills, background, and knowledge in a particular project area that my job was a lot easier. For example, I recruited a registered quarter horse judge to be a horse project leader. Other examples included a dental hygienist for the health project, a mechanic for automotive, and a park ranger for conservation. I also recruited an agriculture teacher to be a project leader. He was great because he was qualified to be a project leader in so many areas of agriculture. This working relationship benefited both of us, because I served as a resource for classroom instruction and training and provided supplemental materials for teaching units.

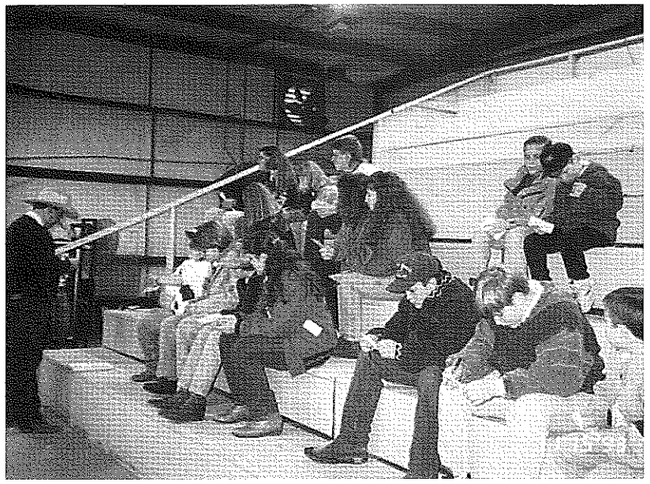
I assumed that this was the way all other teachers and agents worked together. As I moved to an area agent position and a state specialist position, it became apparent that there was more conflict than cooperation between agents and teachers. The only interaction seemed to be during county and state fairs and other livestock events, and this was not always positive interaction. The agents and teachers rarely knew one another, much less cooperated on activities.

Why is it that individuals with similar philosophies, background, and training do not work together? I contend it is more of a lack of understanding and tradition than institutional barriers. Here are a few ideas I would like to suggest for your consideration that might facilitate cooperation.

1. Two heads are better than one. Problems in communities regarding agriculture are complex, interrelated issues. Protective custody of programs or approaches to teaching are insular, self-serving and limiting. The task of agricultural education is too large to accomplish in isolation. There is a wealth of knowledge, skills, and experiences that can be shared between the local teacher and agent. This cooperation is workable; I am aware of several →



Collegiate 4-H and FFA members cooperate to teach a tri-county 4-H officers training workshop.



Junior 4-H members receive instruction on using the livestock judging card prior to a county FFA/4-H livestock judging contest.

agents and teachers who are involved in joint activities. In one case, the teacher serves as a volunteer project leader for the extension program, and the agent assists in the training of judging teams for the agriculture teacher. Agricultural education and extension education are naturally complementary.

2. Share the audience. The legal age of 4-H membership is 5-19. It is a logical progression to have youth as members of the 4-H program that can also be enrolled in the high school agriculture program. Membership should be allowed in both organizations without conflict. I have had several college students tell me they did not care for the competition which forced them to claim allegiance to either FFA or 4-H. Young people are a resource to be developed, not a commodity to be jealously guarded.

3. Limited resources for both programs. There is a limit to the public and private dollars that can be generated to support agricultural education in any community. Why not share educational materials, equipment, and facilities? Sharing can work in most communities where evidence of taxes are paid and programs are operationalized. Sharing is less acceptable at the federal level where regulations and funding barriers occur. However, some simple ways to share resources include using the same facilities for activities, joint activities, sharing in transportation to events, or cost sharing specialized materials, such as land and livestock judging cards.

4. A connection to agricultural research. The farm demonstration has been a method used in extension work for 80 years. This demonstration method of teaching is the useful and practical application of research findings from the Land Grant university. Some teacher educators have advocated that this type of research be added for SAEP work. Networking with extension is a natural linkage to the farm demonstration research process.

5. Professional Development. A lot of attention has been given to instruction in agricultural science lately. College credit courses and seminars are one method to increase one's skills, but a very easy way to stay current in agricultural research is right in the county. Participation in extension training programs is a logical professional development activity for the local teacher.

6. Cooperation on competitive activities. At the local level, there are several judging events and contests that are expensive to conduct and time consuming to organize. Many of the events have the same donors for both 4-H and FFA. Cooperation would be a savings in time and energy. I am aware of a few counties that are having judging contests involving both 4-H and FFA judging teams. It works because the team members judge the same classes, use the judging cards, and give reasons in the same way. Why not? Petty jealousies or squabbles among individuals about who can train the best team caused some to forget that the primary goal should be on educating the child, not winning the contest.

7. Teach cooperation. We cannot afford to just talk cooperation, but we must teach cooperation. How best to accomplish this than "learn by doing." This semester, the University of Arkansas Collegiate 4-H and FFA clubs merged into one club. This was an effort to assist these future teachers and extension agents to understand the programming similarities and differences of the two approaches and the structure of the clubs within the state. Most of the members previously belonged to both clubs, and they found that participating in all the service activities, training, and community service projects of each club was quite exhausting.

Future agriculture teachers and extension agents need to develop an appreciation of both organizations. This learn-by-doing approach consists of alternating club ceremonies and supporting both 4-H and FFA community activities.

I am not advocating joining clubs at the school or community level, but rather a joining of resources for the elimination of unnecessary competition. I am advocating some deep consideration of the many differences founded in tradition. I think both the teacher and the agent will have a lot of work to do in the future to educate the public about agriculture. Wouldn't it be much better if this were a team effort? ■

Cooperation Between 4-H and FFA — An Extension View

BY RENEE D. HINK

Ms. Hink is a 4-H/youth extension agent in Lincoln City, Hugo, CO.

In many areas of the nation, 4-H and FFA go hand in hand. Four-H and FFA have similar backgrounds and roots in the United States.

Extension was founded in 1914 by the Smith-Lever Act. Through this act, youth clubs were founded and 4-H was a reality. The Smith-Lever Act of 1914 did not specifically mention youth work; however, it was understood that the work of rural school superintendents, concerned agricultural scientists, and federal employees in the Office of Farmer's Cooperative Demonstration Work had individually and collectively made youth work the foundation for successful Extension endeavors. The Smith-Lever Act provided the financial support the new Cooperative Extension Service needed for a successful future.

For years, 4-H and FFA have battled for financial support. Four-H and FFA have been in competition for years both in subject matter and in finance. Many people see no need for both an FFA and a 4-H program in the same geographic location. I disagree with this; there is a need for both. Each of these areas focuses on slightly different aspects and therefore touches members a little differently in each program.

Four-H is a broad aspect of education. Four-H not only educates youth, but adults as well. Four-H has its roots in the agriculture field, but is far from being limited to that area. Four-H has additional education in areas from home economics to life skills.

FFA is a more formal education of youth. FFA stems strictly from agriculture and to this day is an agriculturally based form of education, where 4-H has expanded to other areas as well.

Four-H and FFA can be looked at as a puzzle with each group having a perfect fit together. Four-H and FFA work together like clockwork when there are two strong programs. Both programs can gain strength by cooperating and working to complement each other. Dedicated leaders and instructors are the key to building both programs. For today's youth to gain the most from both programs, 4-H and FFA must cooperate.

Various Methods of Cooperation

Judging teams are very beneficial to both programs. Both 4-H and FFA have livestock judging teams. FFA teaches livestock judging from a more formal aspect, the classroom setting. This is taught throughout the school year. In May and June when the end of the school year rolls around, those members who want to continue their judging can do so through 4-H. Primarily FFA takes on the responsibility of training for judging events during the school year, and 4-H takes the reins and instructs youth throughout the year, but primarily during the summer. With both groups working together, yearlong training occurs, and therefore, stronger judging teams in both 4-H and FFA result.

Another area in which 4-H and FFA cooperate is the county fair. Most county fairs are run through the extension system with 4-H being the main focus of the fair. County fair is a time for 4-Hers to show off their project work from the current year. The county fair is also the time for 4-Hers to show off their livestock and agricultural workmanship. County fairs not only allow 4-Hers to shine, but they also allow FFA members to compete with 4-Hers as one. Four-H and FFA members are both allowed to show at the county fair.

When FFA and 4-H cooperate and combine forces to form one show for the fair, they are building and strengthening both programs and making way for more educational elements to be taught. Not only by showing in the same show do the youth learn, but they also learn greatly by sharing experiences and knowledge with each other between groups.

The addition of FFA at the county fair creates a greater enrollment in the fair and also creates more publicity and public awareness of both programs. The two organizations cooperate and therefore bring more people together. →

Group of 4-Hers and leaders assisting agriculture teacher with a research plot.

Four-H also serves as an expansion element for FFA. While FFA focuses directly on agriculture with an emphasis on how to plant crops and raise livestock, 4-H takes this a bit further by teaching youth the home economics advantages, too. Four-H gets into the cuts of meat, how to prepare them and what to do with crops after harvest, just to name a few. Four-H takes FFA to a new dimension. Four-H expands FFA to encompass more ideas and to encompass more people by meeting the needs of other youth in the community who are not involved in agriculture. One program alone can reach a number of people, however, both programs working together can reach twice the audience.

The people who lead these two organizations have a lot to do with the cooperation shared between both 4-H and FFA. FFA advisors are also local agriculture teachers in the school systems. There are a lot of FFA advisors and agriculture instructors who are active in their local 4-H clubs. This cooperation between the two is very valuable. Knowledge is shared between the two organizations, and valuable resource people are shared.

Another important way for FFA and 4-H to cooperate is to work as a team in finding resources. Four-H leaders and extension personnel make excellent speakers and resources for FFA activities. Likewise, FFA advisors work a lot with extension personnel in assisting with judging at fairs and also serving as speakers.

Many times in smaller communities it makes more sense to combine similar programs due to the number of participants. Four-H and FFA often have joint programs utilizing resources from both 4-H and FFA. This creates a coalition between the groups that makes for a stronger program and allows for more learning to take place.

Even with all of the cooperation that takes place between the two organizations, there is still a general problem that continues to surface. FFA is a part of the agriculture program offered in the high schools for credit. This creates competition with 4-H. Four-H is not offered for credit but rather as an extracurricular activity. Many younger youth join 4-H to become involved in agriculture and livestock. As the youth get older, they begin to lead very hectic lives, and finding time for any activity is a real problem. If the schools have a strong FFA program, many times the youth who have received their early training through 4-H will quit this organization and begin FFA because they don't have the time to do both. Their decision is reinforced because they receive credit for agriculture and FFA. Many high school-aged youth see this as a better deal. Ideally, youth should continue in both organizations, since these two groups can work together to complement each other.

Cooperation can be made stronger in the future with a little work from both sides. The key to cooperation between 4-H and FFA is communication. If the leaders of both organizations will communicate and share, both FFA and 4-H will continue to cooperate and grow, strengthening both! Leaders who are willing to work and communication are the factors that make the two pieces of this puzzle, 4-H and FFA, fit together so tightly. ■

Preparing Agriculture . . .

(continued from page 7)

frequently mainstreamed into regular classes. Students in agricultural and extension education must receive training. For the past three years, individuals planning to student teach benefit from the expertise of a resource person in this field, as well as spending a half-day with exceptional students in a secondary agriculture program at a local technical education training center.

Summary

What will the agricultural educator of the future look like? What skills does he or she need to be successful and effective in meeting the needs and issues of the future? The agricultural educator of the future needs to be able to survive in two worlds — to be able to blend the rich heritage of the past with the complex issues and concerns of the future. He or she must be able to assist in identifying those concerns, serve as a catalyst for systematic change, and understand and use the technology of an information-based society. He or she needs to be flexible and adaptable, realizing the responsibilities of the agricultural educator in the Year 2000 may be broader and more complex than today's roles.

Edgar Boone (1990) said:

> "We need to continue to expend every effort to understand our changing environment; develop our staff resources to their maximum, cross lines, function as teams, as needed, and keep uppermost in our philosophy and minds that our work is concerned with developing human beings and human systems to their maximum capacity."

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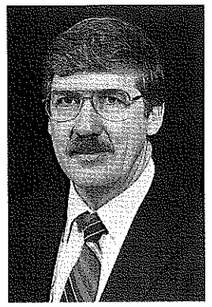
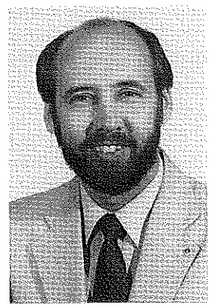
A Team Approach to Agricultural and Extension Education in Georgia





BY MAYNARD J. IVERSON & F. RICHARD ROHS

Dr. Iverson is head of agricultural education at the University of Georgia and Dr. Rohs is an education and staff development specialist with the Cooperative Extension Service, University of Georgia, Athens.

Historical Perspective

Cooperative Extension as an educational resource has been largely untapped by most agriculture instructors (Anderson, 1976). While agriculture teachers and county extension agents may be aware of the functions of each other's jobs, the close working relationship — or team approach — envisioned by early leaders is not always present. This is unfortunate, for teaming up with the Cooperative Extension Service (CES) allows both teachers and agents to make better use of each other's resources, since both have similar goals in meeting the needs of local clientele.

Historically, both have roots in federal legislation at about the same time in our nation's history. The Smith-Lever Act of 1914 nationalized the Cooperative Extension Service, whose main function was agricultural education through demonstration in the rural areas. Similarly, the Smith-Hughes Act of 1917 institutionalized systematic agricultural instruction in rural secondary schools. Thus, both were initiated to provide educational programs in agriculture for rural constituents, but with differences in approach and focus. Both spread quickly and grew concurrently.

As early as 1918, conferences were held between representatives of the Federal Board for Vocational Education (FBVA) and USDA for the purpose of looking toward cooperation between these two agencies in promoting an effective system of agriculture. These meetings culminated in a memorandum of understanding on December 20, 1928 (USDA & FBVE, 1928). Subsequently, individuals in both programs across the nation worked toward developing a cooperative relationship with each other, but leaders in some states sought a closer, more clearly defined working relationship between the two programs.

In Georgia, cooperation between vocational agriculture and Cooperative Extension was codified in the "Statement of Relations" booklet published by the Division of Vocational Education (DVE), State Department of Education, and the Cooperative Extension Service, University of Georgia College of Agriculture, on July 27, 1962. A committee of 15, which included teachers of agriculture, teachers of home economics, and Cooperative Extension county and district agents, formulated the working document. Six goals were listed:

1. Render greater total service to the people of Georgia.

2. Reach the largest number of people in the most effective manner.

3. Develop a better appreciation and understanding of the contributions of agriculture and home economics to the social and economic welfare of the people of Georgia.

4. Promote better understanding of the two groups by the people served.

5. Promote better understanding and coordination among the personnel within the two groups and . . . a wholesome respect, support, and appreciation for each other's work.

6. Promote better teamwork between professional agriculturists and home economists in each county. (DVE & CES, 1962, p.1)

The document stated the purposes of the Cooperative Extension Service and of vocational education and outlined policies for cooperation of the two agencies. Included were:

• district supervisors shall be responsible for providing a copy of the Statement of Relations to all new personnel and familiarizing them with the purpose;

• county staffs shall meet at least quarterly to plan and coordinate programs and activities;

• all professional agricultural and home economics personnel in the county are encouraged to form a "County Professional Group" to meet regularly, elect a chairperson on a rotational basis, have programs relating the roles of the various agencies, discuss upcoming programs and events, and carry out at least one joint project each year;

• state and district administrative staffs shall meet jointly at least twice per year to review the Statement of Relations;

• each supervisory staff shall review the Statement of Relations at their respective annual conferences and district meetings;

• the DVE and CES should work to coordinate their educational programs so the time of participating students will be fully utilized;

• a boy or girl may join FFA, FHA, and 4-H Clubs according to school policy and individual preferences; each member shall enjoy the full rights and privileges of the organization he or she joins;

• separate projects and records shall be kept → by individuals involved in several organizations;

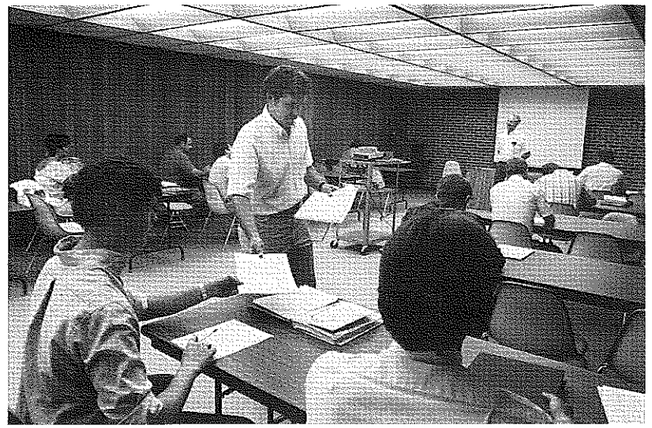
• if a member participates in an activity of one organization, he or she should not participate in the same activity of the other organization;

• vocational teachers and extension agents should jointly plan and set rules for events and activities when boys and girls of both groups are involved;

• FFA, FHA, and 4-H should be given recognition at all meetings of common interest, including local, area, district, and state levels;

• publicity concerning events where Extension and vocational groups are competing should emphasize the achievements of the boys and girls, rather than the organizations;

• when differences of opinion and interpretation of the regulations occur that cannot be resolved locally, the district supervisors of both organizations will be invited to meet jointly with the local groups involved to jointly seek a solution (DVE & CES, 1962, pp. 2-5).



Agriculture teachers and CES agents receive graduate instruction at five off-campus resident centers which are strategically located across the state of Georgia. Dr. Gerard Krewer, (standing in foreground) Extension Specialist and Professor of Horticulture, is shown passing out materials at an advanced pomology course he taught at the Rural Development Center in Tifton. (Photo by Richard Rohs, University of Georgia)

The Current Situation

Today the need for greater cooperation and teamwork is even more pressing. Increased competition for state and local tax dollars has forced teachers of agriculture and extension agents to try to "do more with less." Additional pressures, such as a reduced farm population, changing rural demographics, and a variety of social issues, have caused programs to change directions and emphasis. A recent problem in Georgia was the reduction in funding for many statewide programs due to a dramatic decrease in state revenues. In 1991-92, most state agencies — including the Department of Education and the Cooperative Extension Service — had their budgets slashed. For agricultural education this resulted in a 57% reduction in state-level staff, and for Extension, a 28% reduction in personnel statewide. In addition to staff layoffs, cancellation of new educational programs or other improvements in schools and the postponement of hiring new instructors at the secondary and postsecondary levels occurred. Operating budgets were also curtailed, thus further limiting many current programs from being effectively delivered.

To maintain critical programs and personnel, especially agriculture teachers and county extension agents, new teams or partnerships had to be formed, or in some cases, old ones rekindled. While may CES agents and agriculture teachers worked together in the past to conduct joint activities or events, additional efforts were needed at the local level. At the University, which was also severely affected by the budget cuts, new collaborative teams were needed to meet the new budgetary requirements. Such efforts were especially important because the two programs, Agricultural Education and Extension Education, are academically housed in two different Colleges — Agricultural Education is in the College of Education and Extension Education is in the College of Agricultural and Environmental Sciences.

Program Cooperation in Georgia

How was this teamwork accomplished? What benefits did the Cooperative Extension Service have to offer agriculture teachers and vice versa? As mentioned previously, Georgia had set a precedent with an agreement between agricultural education and the Cooperative Extension Service in 1962 which helped to build a bridge for increased teamwork and collaboration. This agreement, which remains in force today, recognizes that the functions of the two agencies are closely related, especially in the areas of youth group activities and adult work.

Examples of current outcomes of AgEd/CES teamwork in Georgia are as follows:

• FFA and 4-H members participate in a cooperative environment, rather than interorganizational competition, at local, district, and state contests, fairs, and shows. Separate classes are provided for 4-H and FFA entries. When the groups are combined, as in futurity classes, winners are recognized as individuals, rather than by organization.

• Extension agents and agriculture teachers serve on each other's advisory groups. This provides valuable sharing of knowledge of and contacts in the community.

• Agricultural education and extension education personnel at the University join in collaborative efforts for teaching, research, and service activities. Recent examples include a →

joint proposal on agricultural literacy to the Kellogg Foundation, exchange lectures for beginning teachers and agents, and joint promotion of the two programs at college-sponsored recruitment meetings.

• Joint sponsorship of statewide activities, such as the Georgia Special Lamb Project Adoption Program (Farmer, 1993), provides opportunities for handicapped children.

• Extension personnel keep teachers of agriculture abreast of practical information on agricultural topics through local and regional workshops, updates, and field days. In addition, local extension personnel provide bulletins and other educational materials, as well as contacts with state specialists. Teachers disseminate this information to day-school, adult, and young farmer classes, thus increasing the audience for extension efforts.

• Graduate programs feature crossover courses, wherein extension education students use agricultural education courses, and agricultural education students use extension education courses in their respective programs. Examples include methods of teaching, program development, evaluation, and special problems. To accomplish this, both extension and agricultural education faculty teach off-campus courses used by students in the two programs.

• Extension faculty members meet with degree candidates at the new teacher seminar; agricultural education faculty members meet with new agents at their orientation. Furthermore, extension and agricultural education are addressed in each program's implementation manuals.

• Movement between programs is common and cordially facilitated; extension workers go into teaching, and teachers take jobs in extension. Openings in both programs are freely communicated at the district and state levels. Enrollees in Extension Education and Agricultural Education are counseled about job opportunities in both fields. Both are covered by the State Teacher Retirement System.

• Extension graduate courses offered for CES agents and teachers of agriculture promote class discussions and joint projects, which help to team up teachers and CES personnel on real-life, practical problems in the agricultural community. Such projects help local extension agents and teachers form a working relationship which goes beyond the classroom. Each can better grasp the job responsibilities faced by the other and learn from and with the resources each program has to offer.

• Orientation training for extension personnel and preservice preparation of agriculture teachers emphasize the importance of getting new personnel into the community to learn what resources are available and how each program can benefit and help each other locally. Both organizations have orientation manuals stressing such cooperation. Supervisory signatures are required to show accomplishment of these duties during apprentice teaching and CES agent training.

• Agricultural education and extension education graduate faculty members serve on each other's graduate program review and oral exit examination committees.

Summary

Personnel in agricultural education and the Cooperative Extension Service have a common bond in agriculture. In the past this common purpose was served while addressing different audiences in the farming community. Today, with the changing demographics of rural America, there is a need to share expertise not only to better serve the declining farm population, but also to bring agricultural literacy to the growing numbers of non-traditional clientele.

Isolated instances of problems in working relationships between agricultural education and extension personnel can and do occur, but these should not be due to differing program philosophies. In order to minimize the conflicts that will naturally result when dedicated individuals are involved in complementary activities, agricultural education and extension personnel at every level should establish a joint policy for cooperation. There is too much that needs to be done for the organizations to compete or disagree; cooperation is the only reasonable policy. As was so aptly stated by our founding fathers:

> Cooperation should be the watchword in all Smith-Hughes and Smith-Lever relationships. This means going beyond the letter of the law and doing what one is not obligated to do. Both of these laws were instituted in the interests of all the people. Each group, while attending to its own task first, should lose no opportunity to promote, in all practical ways, the work of the other. With this spirit animating both forces, good feeling is likely to prevail everywhere and the maximum accomplished in both lines of work. (USDA, FBVE, 1928, p.6.)

There are a number of tradeoffs to be made and benefits to be accrued from such cooperation. The agriculture teacher gains access to the resources of the Cooperation Extension Service, including assistance from local agents and district and state specialists. Extension personnel benefit from the agriculture teacher's expertise in educational principles and practices and experience/training in applications of technical agriculture, along with access to school populations and facilities. With this team approach, the community is the benefactor.

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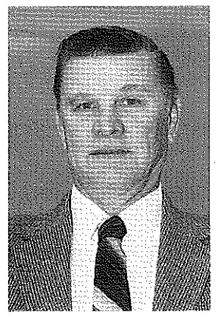
Agricultural Education and Cooperative Extension: No Longer a Marriage of Convenience



BY CLIFFORD L. NELSON & JOSEPH G. CVANCARA

Drs. Nelson and Cvancara are agricultural teacher educators and extension specialists at Washington State University, Pullman.

When the framers of the Declaration of Independence were called upon to sign, Benjamin Franklin reportedly told those who were wavering that "We will either hang together or hang individually." Perhaps the same admonition might be given when discussing the future of agricultural education and Cooperative Extension. In other words, "We are too few to fight."

Until the early 1930s, Cooperative Extension and agricultural education were both administered by USDA. When agricultural education was moved to the Office of Education (now Department of Education) a long-time schism and competitive relationship was developed.

At various times in some states, students have not been allowed to belong to both 4-H and FFA. In recent memory in Washington State, students could not have both FFA and 4-H animal projects of the same species and show them at a fair. Students were forced to designate animals as either 4-H or FFA. Relationships between agricultural education and CES professionals were also varied. At the county level, there has been a long history of personal cooperation between the two groups, but this was also a time when state level personnel were not speaking to each other.

Relationships have changed significantly in a positive direction. However, history has supported limited relationships between agricultural education and CES. Both groups lose and continue to lose from this historic lack of joint activity. Community development efforts of agricultural education through the FFA Building Our American Communities (BOAC) programs should be much more closely tied with CES objectives, locally and statewide.

Science education efforts of 4-H should be closely tied to the national and state agriscience programs. In many schools, agriculture courses are considered as sciences and are often cross listed on a one-to-one basis to meet college and university admission requirements. Significant grant funds have been utilized nationally to develop curriculum in agriscience, fund workshops in teaching agriculture as a science-based course, and for specialized workshop training of agriculture and science teachers.

Examples of the types of workshops offered include aquaculture, bottle biology, and agriscience workshops, which were offered in the state of Washington last year. One of the programs was held at a major experiment station demonstrating university interest and support. Two of the workshops jointly enrolled agriculture and science teachers. The approximately 25 teachers in each of these workshops were introduced to University of Wisconsin Fast Plants and their use in teaching science. Utilization of specialized techniques for science experiments with plastic soft drink and film canister containers was demonstrated. Written summaries of various activities, with specific teaching suggestions, were furnished to each participant.

Many of the same materials and experiments could be utilized by the emerging 4-H science programs. The formal connection has yet to be made. Unnecessary duplication is the result. Washington State University recognized this situation and has added significant extension assignments to two agricultural education professors to move toward more coordinated programs.

Long-term extension goals of promoting safety, proper pesticide use, improvement of water quality, and environmentally friendly agricultural practices are just a few examples of where agricultural education and CES goals are the same. Making full use of both proven educational methods logically makes both fiscal and programmatic sense. In an era where CES personnel numbers are decreasing and agriculture teacher numbers have remained stable or grown slowly (if sufficient teachers are available), increased cooperation between the entities is further supported.

How does CES benefit from such cooperation? First, cooperation gives any jointly promoted and conducted program a stronger thrust. Much educational programming for adults and others in the community could be conducted through the auspices and assistance of agriculture teachers. Extension would gain recognition for reaching more clientele statewide, and agricultural education would develop more community credibility in the latest recommended practices, current research, and for their service to the parents of their students and others in their area. →

A stronger political profile for both CES and agricultural education would be expected as a result of more structured cooperation. Legislators, business leaders, parents, school officials, and representatives of agriculture and the environment would more likely support these programs.

Summary of Advantages to CES

1. Extension would formally add significant numbers of clientele. In Washington state alone, 240 secondary agriculture teachers and their approximately 18,000 students would be active clients. Schools are sufficiently funded so that many of the CES materials needed would be purchased, and there would be no direct costs.

2. Jointly planned and offered programs would automatically have additional human capital for support. Agricultural education professionals could be valuable resources to involve in CES programs and initiatives. Numbers of agriculture teachers have been remaining stable in recent years, with the possibility of growth in specialty programs in alternative schools, as well as natural resources and agricultural sciences programs. These teachers, and in many cases their students, could increase CES capacity to conduct programs. Joint efforts in both youth and adult programs would provide additional professional assistance to each CES professional.

3. Limited extramural support from vocational funds (perhaps Perkins money) might be available for program support.

4. Enhanced CES presence, in parts of many states where limited coverage has been mandated by funding reductions, might be realized. It is not unusual for agricultural education to have larger numbers of professionals and more complete geographic distribution. Thus when agricultural education professionals work with CES, the clientele benefit.

5. Additions to the political strength of CES could be a result of this cooperation. Many states now have their own lobbyists and/or sophisticated organization for lobbying purposes. Agricultural education also has close ties to teacher professional organizations, as well as formal links to former students. Each could contribute to a broader and more comprehensive political presence.

Summary of Disadvantages to CES

1. Support of a combined initial program during budget and personnel cuts and restrictions will require significant justification.

2. Support for the total program budget may not be available annually from outside sources. The variances of state and national legislative support could put new pressures on CES.

3. Service to agricultural education has not been a traditional responsibility for CES. Some might say the "CES already has too much on its plate."

4. There would be increased demands on some of CES's resources because of the addition of the teachers and their students as clientele.

5. Traditional supervisory lines in CES are blurred for the initiation for such a program. Should the program be classified under agriculture? Community development? Youth? How will credit be shared for accomplishments?

Closer planning and cooperation between agricultural education and CES is the right thing to do. The ultimate goals of these complementary organizations are very similar. Each strives to improve the quality of life for all. This is accomplished by quality formal and informal education offered through the public schools and the Land Grant universities. Each strives to improve the environment and encourage personal development and healthy, safe living for our entire population.

Ancient prejudices and petty jealousies must be set aside. Each has much to offer to the other. Citizens would have the prospect of more comprehensive educational alternatives to meet their needs to be more successful and effective citizens in their home, community, and occupation. The possibilities of reaching the underserved would be improved if the education and extension systems were more closely articulated. Ultimately, the public could expect a more efficient and effective educational system.

Closer relationships between agricultural education and CES must be explored at county, state, and national levels. Each would have to adjust styles and modes of operation, but each could look forward to being significantly stronger and positioned to be more effective educational systems in our dynamic society. ■

A Team Approach to . . .

(continued from page 14)

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Cooperation Between 4-H and FFA — A Teacher's View

BY DAWN M. HILDEBRANDT

Ms. Hildebrandt is a graduate student in agricultural education at Iowa State University, Ames.

Both FFA and 4-H are youth programs designed to promote leadership through the development of skills in program areas in which participants are interested. Many of these program areas are similar in the two organizations. This provides advantages for both sides, because youth in FFA and 4-H can participate in many mutual activities, such as leadership workshops and other types of training that pertain to personal development in certain program areas. In the phases of my experience with 4-H and FFA, I have learned about how these youth organizations have worked together and independently.

In Wisconsin, 4-H and FFA have combined activities only in certain project areas, mainly the animal/livestock projects. Judging workshops for dairy, beef, sheep, and swine are very popular events for cooperation between FFA and 4-H. Fair time is an important time for agriculture teachers and extension agents to work together. Most of the county livestock committees that are coordinated by extension agents have agriculture teachers running the different livestock shows at the fair. Many times, each teacher in the county has a preference as to what show he/she will coordinate. As extension volunteers, agriculture teachers play a very important role in the relationship between FFA and 4-H by serving on committees and doing the teaching at judging workshops.

I have been active in both organizations at different times, as I was in FFA in high school and worked with FFA members while student teaching agriculture in Wisconsin. My 4-H experience was later on as I held a position as a summer 4-H & youth agent my sophomore year of college, and later as a 4-H & youth agent after graduating from college with an undergraduate degree in agricultural education from the University of Wisconsin - River Falls. I will be discussing cooperation between 4-H and FFA based on my FFA experiences, but it was also my 4-H experience that helped me to see how cooperation with extension could both benefit and hinder agriculture teachers.

What Works

Communication is the key to developing a good relationship between extension agents and agriculture teachers. As an extension agent, I made sure that teachers received the 4-H newsletters every month and they made their FFA members aware of opportunities available to enhance their individual project development. The teachers then responded to me if they had any participants that wanted to attend 4-H events, mainly with livestock projects. Agriculture teachers are very strong resources in the agricultural aspect of many 4-H projects and need to be recognized as such. Teachers don't have a lot of time to organize events for FFA members besides those set up by the state or region, and this is where 4-H training workshops become useful tools for FFA members. As mentioned before, agriculture teachers serve extension by means of committees, and in return they can count on a number of activities for their FFA members. Extension benefits by having committed committee members willing to work in project areas. FFA and 4-H members benefit by learning from one another, while still developing their talents and skills individually. This relationship takes some work off the teacher's shoulders during the school year. Teachers can also look to extension for resources for teaching their classes because extension strives to have the most up-to-date information available. They may find information from extension that they can't find anywhere else. The more extension agents and agriculture teachers use each other for resources, the better the cooperative relationship will become.

What Hinders

When I was in school, I always thought that FFA was cool and 4-H was not. I had a great agriculture teacher, and it seemed that he didn't need any help providing us with opportunities to enhance our leadership experiences. I showed swine at the fair, and it was then I learned that I needed to attend a judging workshop in order to sell my animal at the livestock sale. This was my first experience with the extension agent in the county, who had organized all of the workshops according to species. FFA and 4-H were combined in the livestock shows, so I competed against 4-Hers in the show ring. However, that was all the contact I had with extension. I was not aware of any other 4-H activities except from 4-H members I knew. The attitude that "FFA is better" was not good for promoting cooperation. My agriculture teacher was not aware of any opportunities outside of FFA. As a student teacher, I still did not learn much about 4-H activities in the county, although we did get the county 4-H newsletter every month. We were too wrapped up in our own program to get involved in 4-H.

(continued on page 20)

Interorganizational Coordination: Why and How

BY ARLEN ETLING

Dr. Etling is an associate professor of agricultural and extension education at the Pennsylvania State University, University Park, PA.

Agriculture teachers should team up with extension educators. Ignoring this opportunity may result in lost resources, unnecessary conflict, professional stagnation, and loss of community support. This article will explore why teamwork is beneficial at the local level. Then a process, interorganizational coordination, will be described to assist agriculture teachers in secondary schools in building teamwork between themselves and county extension agents.

Differences and Similarities

Differences between teachers and extension agents are many and profound. So are the similarities. We need to understand these differences before we talk about the benefits and the process for creating teamwork.

Teachers of agriculture trace their history back to the Smith-Hughes Act, while extension agents look to the Smith-Lever legislation. Teachers are hired by school districts and are subject to the history, organization, and philosophy of the school in which they work. Extension agents are hired by a Land Grant university that has a different history, organization, and philosophy. Within the classroom the teacher is concerned with different criteria for success than the agent who works primarily outside the classroom in nonformal education.

Nonformal education tends to focus on learners of diverse ages, abilities, and interests who bring their own diverse objectives and frequently change those objectives. Extension curricula tend to be cafeteria offerings rather than sequential and prescribed. Students demand immediate usefulness in extension programs, and informal relationships between teacher and learner are the norm. Nonformal education tends to feature a lower level of structure, by necessity, than classroom education.

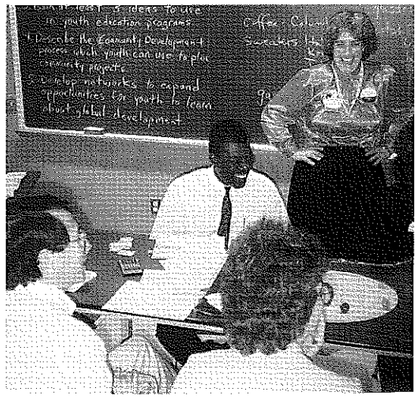
Both teachers and agents, however, are professional educators. Both are concerned with delivering effective educational programs to their learners. Both facilitate learning that is intentional, organized, and goal oriented. Both are accountable for their educational programs. Both are under pressure to do more with less resources, to broaden their educational offerings, and to appeal to increasingly diverse groups of learners.

Benefits

Four categories of potential benefits for teachers who team up with extension agents are discussed below. This list of benefits is not exhaustive, and all of these factors may not benefit teachers equally.

Practical. Many teachers have found that teamwork with the 4-H agent is necessary at the county fair. Details have to be worked out for livestock shows (weigh-in procedures, composition of classes, assignment to pens, schedules, awards, sales). If cooperation is not absolutely necessary, it is usually desirable to avoid duplication of effort. Why can't teachers and agents also cooperate to organize judging contests, community service projects, career days, tours, field days, fund raising activities, and other projects?

Most teachers can benefit from extra educational resources. By teaming up with extension agents, teachers have the potential to "multiply their hands." Teachers and agents can identify ways to exchange their skills to benefit both programs. In some counties the 4-H agent may be able and willing to help agriculture students as a guest speaker or as a coach for one of the competitive judging teams (i.e., meats or horticulture) in which the teacher is not particularly strong. In return, the teacher could agree to help the 4-H members as a coach for a team where she has more experience, as a parliamentary procedure teacher, or as a consultant on farm mechanics issues. Extension agents also have access to extension bulletins, specialists →



Kathy Jones (standing), agriculture teacher at Lower Dauphin High School, Pennsylvania, is team teaching a workshop on "adding an international perspective to 4-H and high school curricula." Workshop participants included teachers and agents, as well as youth and adult volunteer leaders.

on campus, audio-visual equipment, and their colleagues in other counties. These can be useful classroom resources for the teacher. They can also lead to other resources and professional networks.

Pedagogical. By working with a competent extension agent the teacher is likely to observe effective teaching in nonformal settings (outside the classroom). The teacher can also use experience gained from teaching to help the agent with formal teaching techniques. Although many teaching techniques are important to both agents and teachers, differences do exist which can help all educators to expand and refine their own teaching effectiveness. Because of the differences between formal and nonformal education, positive interaction between agents and teachers can broaden each other's philosophy of education. In the past, historical and organizational differences led to a philosophical gap between formal and nonformal educators. Agents were often viewed by teachers as being second rate educators — too unstructured, not professional enough. Teachers were often viewed by agents as too rigid, too much like drill sergeants, too narrow in their approach to youth and education. Those attitudes are no longer just old-fashioned — they inhibit both agents and teachers from appreciating the full potential of formal and nonformal education when they complement and support each other.

Programmatic. Working with extension agents would allow teachers to expand programs. Some agents have experience in program topics in which teachers do not. In a study of career-related needs of high school agriculture students, Bennett (1991) outlined the content areas needed in a comprehensive agriculture curriculum. These included production agriculture, horticulture, agricultural mechanics, agricultural services, marketing, forestry, renewable natural resources, careers, and international agriculture. Agents may have the experience or the contacts to help teachers strengthen their programs in one or more of those areas.

As agriculture programs are expanded, growth in enrollments may be expected to increase. Another key to attracting more students is to understand the differences in certain groups of students. If agricultural education is perceived as not relevant or unsympathetic to an ethnic group, peer pressure would tend to keep these students uninterested. Four-H agents in most parts of the United States have received encouragement to work more with "youth at risk." Risk factors include poverty, lack of family support, substance abuse, low school achievement, ethnic background, and many others. Many 4-H agents can assist teachers in considering new audiences — to develop plans for programs and recruitment techniques that will appeal to non-traditional students.

Client Support. Expanding programs, appealing to non-traditional students, and broadening the teacher's educational philosophy will help teachers do a better job of serving their clients — both existing and potential students. Beyond these two client groups, teachers need to consider such other client groups as parents, agriculturists, agricultural businesses, and the community at large. Extension agents often have contacts in these groups who can help the teacher.

Working together, agents and teachers can mutually support agricultural education and youth development by supporting and complementing each other's programs and by reducing conflicts. In the past, youth have been pressured to choose FFA over 4-H by some teachers or 4-H over FFA by some agents. If youth education programs are youth centered, as they should be, then agents and teachers should work together. The tug of war between 4-H and FFA should be eliminated. When that happens, community residents, no longer forced to choose between 4-H and FFA, will be in a position to support agents and teachers.

Barriers to Teamwork

In spite of all of these benefits, barriers to teaming up with extension will always exist. In addition to the differences noted at the beginning of this article, local differences in the personalities and experience of the agent and the teacher may inhibit teamwork. Sometimes two educators simply find working together to be difficult due to personal style and values. Sometimes ignorance of extension programs and personnel may be a barrier. An insecure teacher or agent may be reluctant to take the personal risks inherent in teamwork. Sometimes impatience prevents teamwork. Sometimes the problem is not knowing how to initiate and nurture teamwork. Understanding "interorganizational coordination" may be helpful at this point.

A Process for Teaming Up

Klonglan's (1975) description of levels of coordination can help teachers assess their current teamwork and determine other opportunities for teamwork (see Figure 1). Moving from a low level of coordination to a mid-level of coordination is easier than trying to create a high level of coordination when no coordination previously existed.

Figure 1. Levels of Coordination

1. No Coordination — no knowledge or desire to work with other agencies providing similar programs.
2. Low Level of Coordination
   a. informal contacts (having coffee together, belonging to the same civic group)
   b. exchange of general information
   c. client referral
3. Mid Level Coordination
   a. formal exchange of information (newsletter, reports, attending meetings →

or activities of the other organization)
   b. exchange of personnel and resources
   c. joint projects
4. High Level Coordination
   a. joint budgetary programs
   b. overlapping boards of directors
   c. joint ownership
   d. written agreements/contracts
5. Merger

Klonglan also offers a set of 10 steps for implementing coordinated programs. The steps, with a specific application to illustrate the steps, are: (1) identify area to be impacted (i.e., community service); (2) correctly define needs and/or problems (i.e., after a needs assessment of their community, FFA and 4-H members decide that the fairgrounds need a better way to weigh livestock than the current practice); (3) identify and contact key organizations to be involved in coordination effort (the fair association is the key organization in this example); (4) get commitment to the problem (FFA members, their teacher, 4-H members, and their agent develop a plan which they present at the fair association board of directors meeting); (5) get commitment to coordination (each of the parties agrees to its responsibility in implementing the plan); (6) work toward consensus (discuss each detail of the plan until everyone involved agrees); (7) identify resource flow (in the plan steps for fund-raising and construction would be specified); (8) define the structure of the coordination effort (fund-raising would come through BOAC and 4-H leaders' council funds, construction plans would come from extension specialists at the university, and labor would be provided by the youth and their parents); (9) define objectives (in the plan); and (10) follow a plan of action (implement the plan through open communication and equal responsibility to anticipate problems and resolve conflicts quickly).

Summary

Increasingly teachers and extension agents are dealing with diverse client groups. Numbers of traditional clients are decreasing for both types of educators. Yet, program success is measured to some extent in both formal and nonformal education by growth in clients and programs. Change, therefore, is necessary. In the process of change, agents and teachers can support each other — use the experience, contacts, resources, and creative ideas of both teachers and agents to strengthen each educational program.

Klonglan's model of "levels of coordination" and his process for implementing coordinated programs can guide attempts to work together. With this information, agriculture teachers should be able to consider the pros and cons of teaming up with extension agents for particular purposes. They will also have a theoretical approach to teaming up with other agencies, groups, or individuals who can benefit their programs.

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Cooperation Between . . .

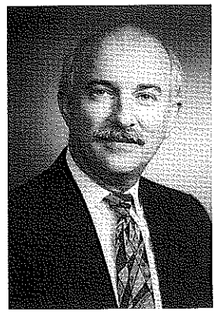
(continued from page 17)

FFA projects are based on the agricultural curriculum within a particular school system, but it may not always suit all the individual participants. Four-H seems to have a broader base of project areas, and it may cause some competition between the two organizations for members. Many FFA members are also 4-H members, which causes some problems, especially for the older members who are officers in both organizations. There are so many activities in FFA and 4-H that members have a hard time being actively involved in both. There is also the competition aspect between members of FFA and 4-H. Although the members learn together, they actively compete for the same awards at contest time, especially in judging contests. This competition is good, but agriculture teachers and extension agents alike should place the emphasis on what is learned and personal development, not on trophies or awards.

Conclusions

The benefits of cooperation between extension agents and agriculture teachers in working with livestock project areas should be utilized in other areas. Leadership-type activities, such as speaking, are different for both organizations, making cooperation difficult. Agriculture teachers could benefit greatly in serving those students who are hard to place in typical FFA project activities by utilizing the extension agents more. It takes time to build a good relationship, and teachers don't always have that kind of time. Extension agents may need to make more of an effort to collaborate with agriculture teachers so all members benefit. There are many more benefits than hindrances, especially with fewer FFA members having agricultural backgrounds and 4-H having so many other project areas. There should be a way that agriculture teachers and extension agents can communicate their needs to each other to make 4-H and FFA experiences comparable. Getting past those barriers of competition and concentrating on the personal development of the individual members is the most important aspect of cooperation between 4-H and FFA. ■

Tech Prep — Lessons Learned



BY DAVID M. COFFEY & TONY BRANNON

Dr. Coffey is a professor of agricultural education and Tech Prep liaison in agriculture at Western Kentucky University, Bowling Green. Dr. Brannon is a professor of agricultural education and Tech Prep liaison in agriculture at Murray State University, Murray, KY.

Former Georgia governor Lester Maddox once responded to an inquiry on the best way to reform prisons in his state by proposing, "What we need is a better brand of prisoners." The time has come in educational reform that people are now realizing that "what we need is a better brand of students."

The Kentucky Educational Reform Act and similar educational reform movements around the country are based on the premise that all students can learn and learn at high levels. We have heard growing concern for "the neglected majority" — those students who choose not to immediately enter a traditional four-year college or university. One such program, Tech Prep, has been designed and implemented especially for this "neglected majority." As with the adoption of all new programs, the progress will be slow and there are bound to be problems encountered and mistakes made.

However, our attitude must be the same as a statement once overheard while working in a west Tennessee tobacco field. A fellow worker in commenting on the progress his son had made in picking up the manual labor routine of hanging tobacco said, "You know, my son's not too awful smart, but he sure is quick to catch on." Well, we in agricultural education need to be "quick to catch on" and learn some lessons as far as Tech Prep is concerned.

Lessons Learned in Guiding Effective Tech Prep Programs in Agriculture

1. Money! Money! Money! By providing funds for Tech Prep, the Carl Perkins legislation of 1990 changed the federal funding pattern for vocational education. Additional future funding possibilities for a local program may be tied to this effort.

Tech Prep monies are available only to local consortia, which means working with colleagues from other levels and disciplines. Tech Prep grants are very specific as to their use and are not simply a windfall for financing new equipment for laboratory improvements. The grants are for three-year periods with first year grants being for planning only. Second and third year grants may be used for salary, supplies, travel, and equipment.

2. Choose the Tech Prep coordinator wisely. The Tech Prep coordinator is tantamount to success. In Kentucky, coordinators range from an administrator in the district office to a principal or assistant to a teacher in the school. Careful selection of the coordinator is a must to avoid the issues of territory and partiality that are part of human nature. Coordinators must dedicate themselves to working long hours by participating in numerous local, state, and regional meetings, as well as establishing relationships within the industries of the community and the postsecondary institutions involved.

Several agriculture instructors are serving as Tech Prep coordinators for their local consortium. Teachers can make excellent coordinators, provided administrators allow appropriate time for working with the grant. Especially difficult is the role of a teacher as coordinator if no compensation time is awarded for implementing the grant. Teachers must realize that their instructional time will be limited and their classroom efforts may sometimes be secondary to Tech Prep coordination.

3. Tech Prep is a continuous curriculum effort involving groundwork laid by a planning/steering committee. The success of the overall effort will depend on the development of an informed, diverse, and flexible planning committee whose major goal is to better prepare future citizens with skills needed to enter and compete in a globalized workforce.

Tech Prep involves a committed partnership between all levels and sides of secondary and postsecondary schools, colleges, universities, business/industry, community leaders, parents, and students. Before applied academics and Tech Prep can be successfully integrated, the human groundwork must be laid. Rivalry and suspicion that sometimes exist between academic and vocational personnel must be overcome. An initial meeting should be one in which attitudes on the roles and responsibilities of each teaching area (academic, vocational, secondary, postsecondary) are discussed and evaluated.

Some planning committees ease the apprehension of implementing change by touring workplaces in the area and meeting with company personnel who address their needs and the role Tech Prep could play. A must for any steering committee is a meeting "on-location" in the postsecondary institutions to tour facilities, as well as meet with instructors to begin dialogue. A successful model has also included a follow-up tour of the postsecondary institution and related industries by all secondary teachers involved. Tech Prep grants afford →

teachers the benefits of hiring substitutes, allowing travel, and sometimes granting compensation for committee members for after-school activities. Travel monies also allow teachers to see other successful projects and learn "firsthand" the trials and tribulations of similar projects.

4. Postsecondary as well as secondary instructors must embrace the concept. Unlike most teacher educators, who are in school systems and communicate with teachers regularly, many instructors in postsecondary institutions have not visited a secondary classroom for years. Invite these individuals to become a part of the coordinating committee. Invite them to visit your classroom and give lectures. Make them feel like they are a vital part of the program.

5. Articulation agreements are tricky and don't necessarily guarantee admission at another level. What could be more embarrassing and potentially fatal to a program than producing a student who is not accepted to a postsecondary program after completion of a Tech Prep program? To avoid such a debacle, knowledge and understanding of the roles of the secondary counselor and postsecondary admissions personnel are essential. However, many agriculture teachers are unaware of admissions requirements, and even if they are, they may be unaware of recent changes in admissions.

In many postsecondary institutions, admissions personnel are not attuned to transcripts which indicate competency in "Applied Algebra or Physics" rather than in Algebra or Physics. Agriculture instructors in postsecondary institutions should meet with admissions officials and explain the admissions requirements and process to secondary officials in a meeting with the coordinating committee. If issues remain, then secondary agricultural educators and guidance personnel should meet with postsecondary admissions and program officials to settle differences. Extremely important to the admissions process is completion of state and/or diploma and graduation requirements as they relate to postsecondary admissions.

While understanding of requirements is essential, the process of admissions is equally important. When are the deadlines? Which forms are required? What about financial aid? Is there a minimum ACT or SAT requirement? Will coursework in this program transfer to a four-year program or institution? Individuals at all levels in Tech Prep must be aware of the process of admissions.

6. Tech Prep is <u>not</u> an automatic "equivalency" to taking courses at higher levels. The movement to semester courses in some states has some administrators convinced that a secondary course entitled "Plant Science" is the equivalency of "Plant Science" offered at the postsecondary level. Therefore, they think if one takes a course in the Tech Prep program, credit should be granted at the postsecondary level for courses of the same title.

Inquiry into policies regarding equivalency credit is a must prior to signing agreements of articulation. In some institutions policy dictates that students will be allowed to "test out" of an associate-level course. While in other institutions, regulations on the number of credit hours "on-campus" or admissions procedures will prevent equivalency credit.

Wise teachers who participate in Tech Prep will begin work early in the process to identify key professors teaching required courses at the postsecondary level and establish a working relationship with them. Copies of course syllabi, suggested texts, lab materials, and procedures are needed by the secondary teacher to determine the level of training expected from the participating school. Instructors at the postsecondary level should also be invited to participate in departmental activities. Stipends from grant funding help entice persons to the local school.

7. Tech Prep must prevent the need for remedial education at a higher level. One of the major gripes of administrators in postsecondary institutions is that a large amount of their budget is spent teaching remedial courses. Blame for this problem falls to the secondary system. To a certain degree this has been caused by students having an unfocused, "smorgasbord" approach to their high school efforts. They have chosen a "little here" and a "little there" and graduate from high school while failing to develop college-level skills. If all teachers work to prevent the need for remedial courses, whether they be English, math, animal science, botany, or others, and develop Tech Prep curricula to the point of erasing the need for remedial education at the postsecondary level, a major hurdle in public education will have been crossed.

8. Tech Prep is an attempt at educational reform, but only one part of it. While a major concept of Tech Prep includes the restructuring of traditional curricula to applied curricula that integrate vocational and academic education, reform is much broader. Reform may include issues as diverse as school funding, length of school year, value of Carnegie unit, assessment procedure, student involvement in organizations, and family resource centers. However, curriculum is <u>one</u> part of the overall reform effort, and Tech Prep can play an integral part of it.

9. Tech Prep is more than the integration of academic and technical instruction. Tech Prep emphasizes the need for preparation of students to successfully enter the workplace. Self-esteem, work ethics, cooperative learning, and career plans are vital to the success of any→ individual. These life skills must become a part of the total program.

10. Tech Prep allows movement from one career area to another. A major goal of Tech Prep is to ensure that each student has a direction and plan to get from where he/she is to where he/she is going through an intentional, structured program. Tech Prep encourages students to explore a number of career options and is not a dead-end approach.

Conclusion

Remember that whether the Tech Prep program is a 2+2, 4+2, 2+2+2, or whatever; the math doesn't count as much as the final product — a student with the necessary skills to compete in a globalized economy.

TECH PREP AND CAREER PREPARATION

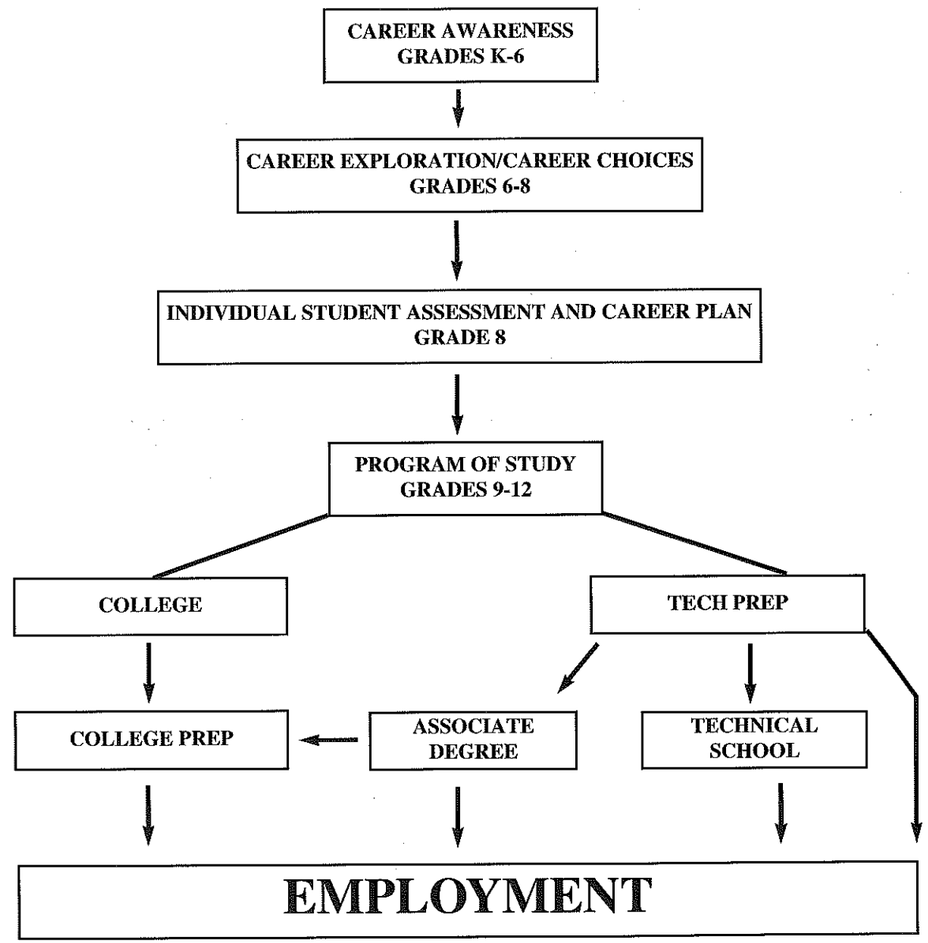


Figure 1. A redesigned educational model indicating Tech Prep's role in leading students to employment. (Illustration courtesy of Tony Brannon, Murray State University and David Coffey, Western Kentucky University.) ■

REMAINING THEMES FOR 1994

Issue/Theme	Due to Theme Editor	Theme Editor
June *Supporting Professional Diversity*	March 1, 1994	Dr. Eddie Moore Dept. of Ag & Ext. Education Michigan State University 410 Agriculture Hall East Lansing, MI 48824-1039
July *Innovative Curricula*	April 1, 1994	Dr. David Coffey Ag Science and Tech Education Dept. of Agriculture Western Kentucky University Bowling Green, KY 42101
August *Instructional Technology*	May 1, 1994	Dr. Kerry Odell Agricultural Education West Virginia University Agricultural Sciences Building Morgantown, WV 26506-6108
September *Experiential Learning*	June 1, 1994	Dr. Gary Leske Dept. of Vocational & Tech. Education University of Minnesota 320 Vo. Tech Building 1954 Buford Ave. St. Paul, MN 55108
October *Junior High and Middle School Programs*	July 1, 1994	Dr. John Hillison Agricultural Education Virginia Polytechnic Institute and State University Blacksburg, VA 24061-0343
November *Research Findings: Using What We Know to Improve Teaching and Learning*	August 1, 1994	Dr. Jimmy Cheek Ag and Extension Education University of Florida 305 Rolfs Hall Gainesville, FL 32601
December *Environmental Education Programs*	September 1, 1994	Dr. Tom Bruening Ag Extension Education The Pennsylvania State University 323 Ag Administration Bldg. University Park, PA 16802-2601