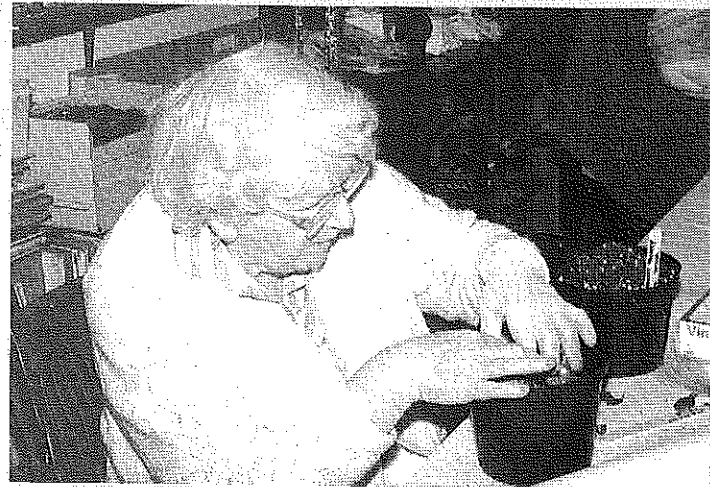
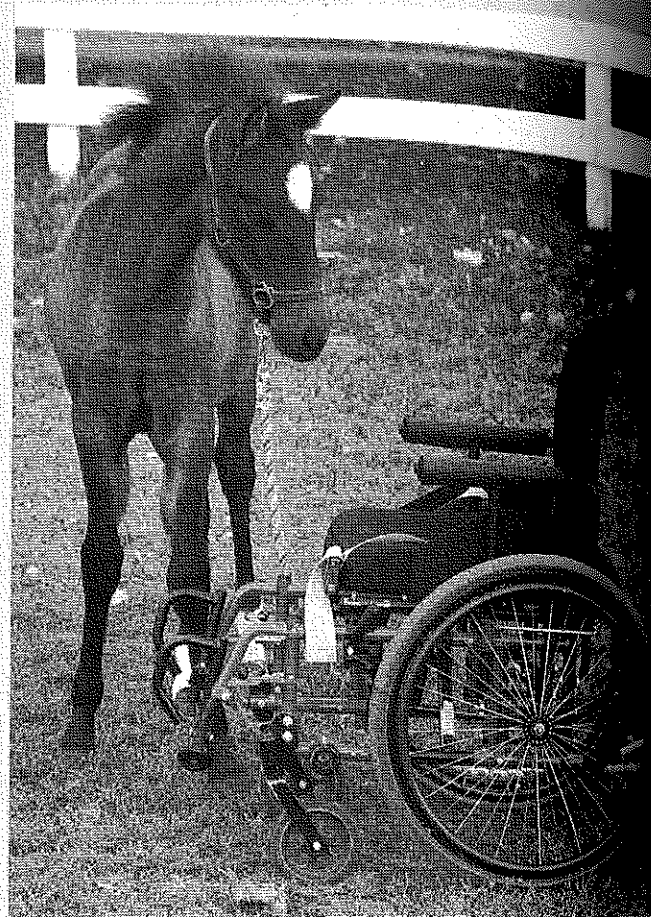


STORIES IN PICTURES

Serving Individuals With Disabilities



Patients can often relate to plants when they cannot relate to other people or cope with their environment.



Horseback riding as a form of therapy has been developed in many countries in the past thirty years. (Photo courtesy of Steve F. Williams, Penn State.)

Upcoming Themes

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May	Lab Facility Improvement	Dr. Glen Miller University of Arizona
June	Agricultural Educators in Non-School settings	Dr. Al Mannebach University of Connecticut
July	Strengthening Programs	Dr. Earl Russell University of Illinois

The

Agricultural Education

Magazine



Teaching Agrimarketing

THE AGRICULTURAL EDUCATION MAGAZINE



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Change is Tough



ED OSBORNE
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Curriculum update is never done. Just when you think you have positioned your program on the cutting edge, another curriculum emphasis emerges. We have spent the last five or so years making secondary agriculture programs more science based. And despite what the critics might say, in general, significant progress has been made in this area. But change is tough, especially curriculum and program change.

According to a recent report published by the National Center for Educational Statistics, very few teachers implement new ideas and strategies learned in workshops and other inservice programs. Of course, we would like to think that agriculture teachers are the exception. I have worked with several colleagues over the past three years to assist teachers in implementing innovative agriscience courses. These efforts have, at least in part, enabled some teachers to completely implement these new course materials, and many others have made significant progress toward partial implementation. But this teacher inservice program is somewhat unique in that it has provided sustained assistance to teachers. We have continued to provide workshops and answer technical questions about performing lab exercises included in the new course materials.

By contrast, most teacher inservice programs are one-shot efforts, due to restrictions in funding and staffing. Too often in our professional update sessions we violate familiar principles of teaching and learning. We attempt to help teachers *learn about* new methods and ideas, rather than taking an experiential learning approach. The result for most participants is a non-functional familiarity with the innovation, as opposed to working knowledge.

However, recent teacher inservice activities sponsored by the National Council have been very hands-on oriented. We must strive to continue to offer these kinds of inservice programs to agricultural education professionals. But even this approach is not enough; sustained support and technical assistance must be provided to local teachers. A teacher partner approach to curriculum revision and improvement may make the difference in teacher adoption of curriculum innovations. Teacher partners could be self-initiated or coordinated at the district or state level. With this approach teacher partners would take professional leave days to travel to their partner's school and work on implementation plans. The team may also

EDITOR'S COMMENTS

see a need to visit an expert in the area at a college or university. Without sustained support at the local level from both teacher partners and state-level experts, teachers are likely to never reach the action stage of curriculum change. Teacher partners should be carefully matched. Program improvement goals of the two teachers should be similar with regard to the innovation, and personalities should be compatible. Thus, partners may change as various innovations are considered for adoption.

With the many new curriculum materials being developed today, teachers should realize that their individual program cannot give equal focus to all areas of the agricultural industry. However, this does not mean that all areas should not receive some attention in the curriculum. If teachers attempt to add every new curriculum innovation to their program, the result is likely to be a disjointed, unfocused, superficial instructional program for students. By contrast, teachers should provide baseline instruction in all major areas of agriculture, and provide specialized, advanced instruction in a few selected areas. Agrimarketing and agribusiness would certainly be an appropriate specialized instructional focus. Agriscience would be another. Most would contend that an in-depth, experiential learning approach to a few areas results in greater learning than a general, "learn about" approach to many areas. These decisions must be based upon program objectives and student wants and needs, tempered by current trends in agricultural education and the agricultural industry. Teacher expertise and resource limitations should not be viewed as roadblocks to implementation of innovative curricula, but rather as problems to be solved.

The key to reaching the implementation stage of curriculum innovations is a positive attitude, focus, support, and careful planning. Development and execution of the implementation plan requires the involvement of other professionals, as well as key local groups. Change is tough, but if a carefully developed implementation plan is carried out one step at a time, we can make it happen.

About The Cover

FFA members from Fullerton, California present their marketing plan during the National FFA Convention competition. 1992 marked the second year the annual contest was held in Kansas City. (Photo courtesy of National FFA.)

Teaching Agrimarketing



BY JAMES LEISING
Dr. Leising is supervisor of teacher education, agricultural education, University of California, Davis 96516.

One of the primary goals of agricultural education programs continues to be preparation of secondary and community college students for careers in agriculture. The literature is clear that agriculture holds tremendous career opportunities. Twenty percent of America's work force is employed in some phase of the agricultural industry. According to Joyce Winterton (1992), there are over 8,000 job titles in agriculture. However, career opportunities have been changing from production to agribusiness and marketing during the past 30 years, with dramatic shifts noted in the past 10 years. Today, there are seven people working in agribusiness/marketing for every farmer. Beierlein (1988) reported that over 80% of those involved in agriculture are employed in marketing, and that 17% of America's gross national product is generated through agricultural marketing activities. The United States Department of Agriculture (1988) reported that nearly 50% of all new college graduates in agriculture are employed in jobs that are categorized as agricultural sales, marketing, management, or finance. In comparison, agricultural production jobs represent less than 8% of the jobs for new agriculture graduates.

Agriculture Curricula Must Reflect Employment Trends

Agricultural employment opportunities have clearly changed for many high school, community college, and university agriculture graduates. As career/vocational educators who have historically used employment data as a major factor in determining the local agriculture program curriculum, it is logical to assume that curricula in agriculture have changed to reflect agriculture employment trends. Although major changes have been made across the United States in integrating science into agriculture curricula, it is evident from review of agriculture program curricula across the country that little, if any, progress has been made toward infusing agricultural marketing into the core of the curricular offerings in most agriculture programs. This conclusion is alarming when one considers that more jobs are available in agri-marketing than in any other single career area of agriculture.

Why has it been difficult for agriculture teachers to reorient the curriculum toward agri-marketing? (Note: Agrimarketing is defined as the production, distribution, promotion, and pricing of an agricultural product in such a way

as to satisfy customers' needs in a profitable manner.) Many agriculture teachers that I have talked with indicated that they find this subject confusing and have lesser amounts of academic preparation and work experiences compared to agricultural science and natural science course work and experiences. Some of this confusion is surprising, because we live in a free-market economy and marketing has had so much to do with the prosperity most of us enjoy. James Beierlein (1988) stated, "Marketing plays a vital part in our economy's success by resolving the conflicting needs of producers and consumers. It does this by helping producers to better understand consumer needs. Marketing allows producers to decide what products to make and when to produce them. Done efficiently, marketing leads to greater satisfaction for consumers and higher profits for producers."

Purpose of Agrimarketing Theme

The primary purposes of this issue on *Teaching Agrimarketing* are to provide agricultural educators with a clearer understanding of the importance of agri-marketing, what to teach about agri-marketing, how local agriculture programs are teaching agri-marketing, what new and exciting FFA agri-marketing activities are available, and examples of instructional tools that industry has developed to assist teachers in renewing their emphasis on agri-marketing.

What to Teach About Agrimarketing?

The literature is rich in information about agricultural marketing. However, as an agriculture teacher it is difficult to know what is most important to teach about this subject. To assist teachers with this question, the National Agrimarketing Task Force of the National Council for Agricultural Education developed and validated in 1989-90 agri-marketing learning outcomes to serve as a core for secondary and community college agriculture programs across the United States. Following is a summary of the major learning outcomes.

Basic Economic Concepts

- Economic systems form the basis for agricultural commerce of the world. Students will demonstrate a knowledge of these economic systems.
- All agricultural businesses (farm and non-farm) function under various

business structures. Students need a basic understanding of ways of doing business.

- Agricultural commerce is carried out in a competitive world environment. Students will demonstrate a knowledge of competition as a part of the marketing process.
- Profitability is essential to success in agricultural commerce. Students will demonstrate a knowledge of cost/benefit ratios and other measures of profitability.
- Risk is a primary component of agriculture in the free enterprise system. Students will understand types of risk and how to manage risk.
- Many alternatives exist for the use of available resources. Students will understand how to make the best use of available resources and consequences of inappropriate use.
- The forces of supply and demand determine production levels in the free enterprise system. Students will understand the concepts of supply and demand and how these relate to agricultural commerce.
- Resources are needed to carry on agricultural commerce. Students need to understand the types of costs as related to agricultural endeavors, including fixed variables.
- Profitability is producing at the level at which greatest profit is achieved. Students will understand the law of diminishing returns and substitution of input as related to determining maximum profit point.
- Money has value over time. Students will understand concepts of time and value of money as related to inflation, to cost of using money (interest rates), and to the making of investments.
- Society is served by standards of agricultural economic endeavor. Students will understand the roles of government in policy making, standards of product uniformity, and as a participant/catalyst in the economic system.
- Commerce is facilitated by industry/commodity group functions. Students will understand the concepts of industry standards and promotion of the various organizations that participate in ensuring product acceptance and availability.

Basic Marketing Concepts

- Marketing is an integral function of the food and fiber system. Students

will understand the meaning and role of marketing in the agricultural industry.

- Consumers demand products that are readily available in the desired form at an acceptable price. Students will understand the concepts of market margin and the processes involved in getting products to consumers.
- Various functions are involved in providing consumer goods. Students will understand the functions of marketing in the agricultural industry.
- Vertical integration is an important component in marketing certain agricultural products. Students will understand the concept of vertical integration and how it relates to certain production enterprises.

Marketing Plan Process

- Profitability in agricultural endeavors depends on planning the marketing process. Students will understand the importance of developing a marketing plan for various products and services.

Commodity Marketing Alternatives

- Commodity marketing alternatives are methods of conveying agribusiness products between buyers and sellers. The willingness and/or ability to absorb risk will affect the choices of marketing alternatives. Students will be able to demonstrate a knowledge and application of these various marketing alternatives.

Agribusiness Selling

- Selling is a necessary function of the free enterprise system. Therefore, students must have an understanding of the entire sales process and the role it plays in the agricultural industry.

International Trade

- Agricultural commerce is a worldwide endeavor. Therefore, students must develop an international perspective of agriculture and understand the role that culture, political systems, and trade policy play in the export and import of agricultural commodities and products.

Careers in Marketing

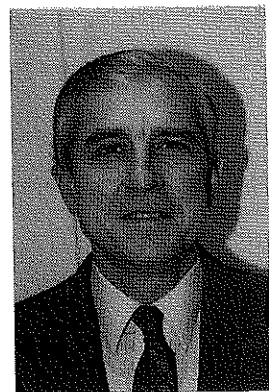
- There are many opportunities in marketing within the agricultural industry. Students will be able to identify specific careers in agricultural marketing and gain knowledge in preparation for those careers.

Human Relations in Agribusiness

- Profitability of agribusiness is dependent on human relations.

(continued on page 23)

Why Teach Agrimarketing



BY JASPER S. LEE

Dr. Lee is professor and graduate coordinator of agricultural and extension education at Mississippi State University, P.O. Box 6060, Mississippi State, MS 39762.

Marketing is the key to success in any area of the agricultural industry. It determines if a profit will be made. Efficient production is of little benefit if what is produced cannot be converted into income for the farm, ranch, or agribusiness. The decision about what to produce must be based on the availability of a market. Education in marketing most definitely presents a challenge to agricultural educators!

Definitions and Description

Marketing is frequently defined as meeting the demands of consumers for goods and services. In the agricultural industry, marketing is often given a somewhat different interpretation. Not only is the produce of farms and ranches marketed, but supplies and services are marketed to producers, and the food and fiber must be marketed to the final consumer.

The term, agricultural marketing, is often used to describe the marketing of crops, livestock, and other produce of farms and ranches. In practice, agricultural marketing has been shortened to "agrimarketing". It is a complex process. Agrimarketing begins when a producer is deciding what is to be produced. Will cotton, soybeans, rice, or wheat be my best crops? If there is no market available, a crop should not be produced.

Agrimarketing

Agrimarketing involves getting food and fiber to the consumer in the desired form. Unfortunately, farmers and ranchers may only be concerned with the change of ownership after it has been produced. Of course, it is intended that the change of ownership will result in payment to the producer that more than pays for the cost of production. An astute farmer or rancher is much more informed than just to sell what has been produced!

Just because ownership has changed doesn't mean that marketing has been completed. In fact, ownership may change several times as a product is moved from the farm to the final consumer. The farmer may sell produce to a processor who in turn re-sells it to a wholesaler and later a retailer after processing.

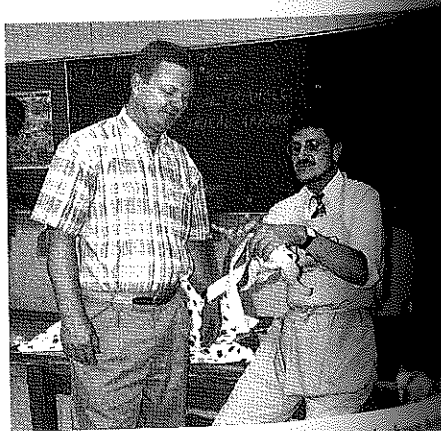
In some cases, production is vertically integrated. This means that farmers, suppliers, or processors may be involved in other steps of the process of meeting consumer needs. For example, pork producers may own the packing

plant and be involved in promoting consumption of pork. With the broiler industry, the processor is fairly in control of what is produced and how it is produced. The poultry processor contracts with farmers, provides services to assure that the birds are produced according to specifications, manufactures its own feed, and processes the grown chickens to the right size for the most profit. Providing food and fiber is no longer a simple process of growing a few crops or livestock. Both young and adult students need education in the fundamentals of agrimarketing, as well as instruction in how to keep up to date.

Functions

Agrimarketing is often said to be composed of several functions. These are the steps in assuring that the needs and demands of consumers are met. The major functions in marketing farm produce are: assembling and grading, transporting, storing, processing, packaging, advertising and promoting, selling, and distributing. These functions are typically sequenced from the farm gate to the supermarket or other outlet to the consumer.

In addition to the above functions "beyond the farm gate," planning must occur before crops, livestock, and their products are produced. Farmers and ranchers need good information to help them decide what to produce. Some people list the function of deciding what to produce as the first function. Another function that must occur is for the supplies and services sector to provide the inputs that farmers



Alabama agribusiness teacher Carl Woods is shown being instructed by James Del Prince in how to make a floral arrangement. Prince, a floral design instructor at Mississippi State University, provided instruction to Alabama and Mississippi teachers that included a wide range of floral design products to meet consumer demand.

and ranchers need to be productive. Therefore, agrimarketing is comprised of more than the functions after the farm gate. An infrastructure must be in place to make marketing possible. Infrastructure includes highways to transport farm produce, trucks to haul it in, receiving stations or processors to prepare the produce for consumption, and a distribution system to move it to the consumer.

Importance of Agrimarketing Education

Since success in marketing is essential for success in agriculture, agricultural education must begin with the basics of economics. Of course, with many young students this is easier said than done. Students are more interested in animals, mechanics, and related areas than they are in economic theory. Many teachers are probably more interested in teaching some areas of animal science, wildlife conservation, agricultural mechanics, and similar areas. Their enthusiasm, or lack thereof, may rub off on the students!

Emphasis on science in today's agriculture curriculum should not overlook the social science areas. One who knows and applies biological science to efficiently produce a high quality crop may find little profit in agriculture without some understanding of the social science areas.

Economic System

Subsistence agriculture is gone. Today's farmers and ranchers produce for specific markets. This means that they are commercial

farmers and ranchers. They may specialize in one, two, or no more than a few products. They may consume none of the produce in their homes directly from their farms. They go to the supermarket for their food just like people in other occupations.

A fundamental understanding of free enterprise will help students develop skills in making decisions in agrimarketing. Instruction will focus on the meaning of free enterprise and its characteristics, such as the ownership of private property and the freedom to go into business and buy and sell with few restrictions. In addition, instruction in the ways of doing business in the United States is much a part of economic education. Teaching students how to interpret market information and the trends behind the market will help them to perform effectively in the long term.

Success Depends on Skills in Many Areas

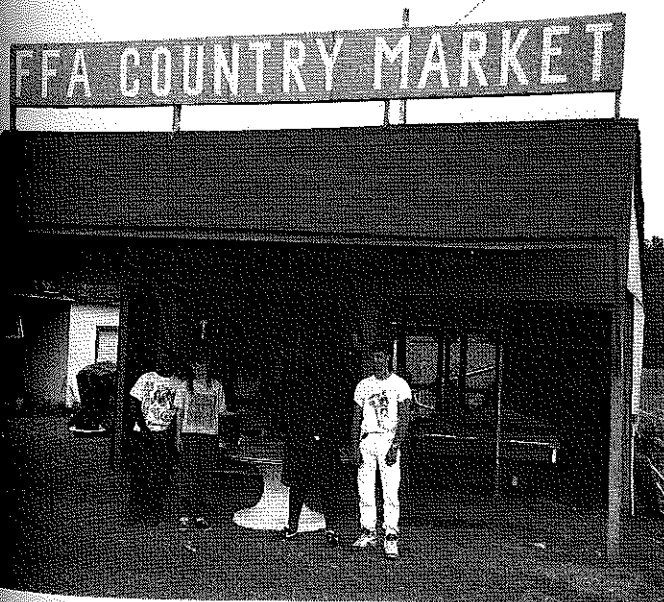
Success in agricultural industry depends on many factors. Performing job duties is a key ingredient. Regardless of where an individual works in the agricultural industry, contributions are made to meeting the demands of consumers. Quality products result when people care about their work and strive to assure quality. Efficiency results when owners and employees use resources for maximum production. Efficiency helps to keep the costs to consumers down and the profits to owners up. This results in the opportunity for workers to get more returns (better pay) from their work.

Agrimarketing is more than the work of marketing specialists. It is the business of all who are involved in producing food and fiber.

Summary

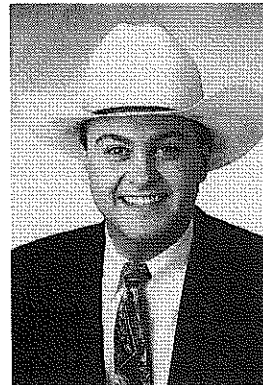
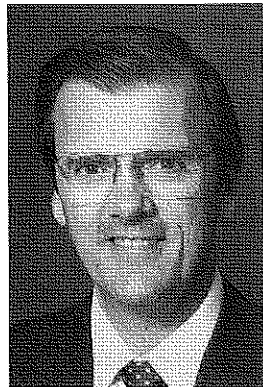
Of all the areas of instruction in agricultural education, none are more important to success in agricultural industry than agrimarketing. Every individual who is planning to pursue a career in agricultural industry needs such instruction. In addition, all individuals need a basic understanding of agrimarketing so that they will be better consumers and citizens.

The challenge in agricultural education is to make the instruction exciting and relevant. With younger students, creative strategies are needed to gain their attention and interest. With adults, more emphasis on coping with the challenges of the world they work in may be sufficient motivation. Both "what to teach" and "how to teach it" are important. Regardless, the success of our students may well depend on instruction in agrimarketing!



Students at Greene County Vocational Center in Leakesville, Mississippi, preparing to open the seasonal produce stand on their school farm. The instructional facility includes planning what to produce, producing it on the adjacent school farm, and selling to the consumer at this facility operated by students. Students are involved in all aspects of the operation.

Agrisaales and Marketing



BY W. DAVID DOWNEY
AND SCOTT CROUCH
MCFARLAND

Dr. Downey (top) is professor of agrimarketing at Purdue University and director of the Center for Agricultural Business. Mr. McFarland is a senior in sales and marketing at Purdue University, 781 Krannert, West Lafayette, IN 47907.

A Day in the Life of Jeff Hamilton -- District Sales Manager for Superior Seeds

The 7:00 AM breakfast meeting that he had organized with a small group of targeted large farmers in the southernmost part of his district was the way to start the day, in Jeff Hamilton's opinion. Even though it meant leaving home before 6:00 AM, Jeff had learned that early morning breakfast meetings were an excellent way to get the attention on key growers who didn't mind sharing some ideas over ham and eggs at Dot's Coffee Shop. During the breakfast meeting that stretched to nearly two hours, Jeff had accomplished the following: learned that a new insect problem seemed to be brewing in the area, their new hybrid was exceeding customer's expectations, picked up important information on a competitor's travel incentive program, and obtained agreement from a top farmer to host a field day next year. Not a bad start for the day!

Jeff spent the rest of the morning calling on his farmer dealers, going over their sales results for the spring season, and planning for the upcoming grower appreciation days. Between farms, Jeff used his car phone to call the company agronomist to get more information on the new insect problem and left a detailed message in his regional manager's voice mailbox about the competitor's new incentive travel program.

Jeff's luncheon engagement was with a vice-president of a rural bank. His company had targeted lenders as a key influencing agent for farmers' buying decisions. He was pleased that he had also obtained several leads from the banker about potential new dealers.

Jeff's afternoon was just as busy. He stopped by to check returns at two retail store dealers, and he spent time soothing over a disgruntled farmer with a poor corn stand. It took some real detective work to trace the problem to an intermittent problem with the farmer's planter.

When Jeff got home he sent his weekly call report by e-mail to his regional manager in St. Louis, faxed his fall sales estimates to the marketing manager in Columbus, and just made it to his son's little league game in time to see him score a run in the bottom of the third inning. Later that evening, Jeff updated his customer profiles on his lap-top computer and planned the details for the next day.

Jeff is an excellent example of today's field marketer. He truly manages a market area, using high level technology to help farmers solve agronomic problems and improve their economic position. He knows that his job is to be a problem solver, and by doing so, he will sell product. He has been empowered to manage his territory, using a wide range of marketing tools and state-of-the-art electronic devices to communicate with other members of his organization. Jeff is the "point man" on a complex team that is organized to deliver products and services into a highly competitive and complex market.

Note that Jeff's selling skills are not used to push product, but to gather information, service customers, and deal with problems. A strong base of technical skills is complemented by an understanding of the marketing process. Jeff works closely with technical specialists, corporate marketing staff, and managers. He practices keen listening skills to understand his cus-

tomers' needs and market trends and then feeds this critical information to corporate decision makers. He has latitude to utilize a wide variety of resources to develop programs and approaches to meet the unique needs of individual farmer customers.

Jeff is quite typical of today's agrisaales person. Jeff's role as the "point man" for the entire corporate marketing effort is critical to the company's success. While salespeople who work with large corporate organizations may have the resources to be more sophisticated in their approach than salespeople working with smaller, local agribusinesses, the entire market is very rapidly moving in this direction. A salesperson working for a local feed mill may not need to use voice mail or to drive 30 miles before breakfast, but his or her work with local dairy or livestock producers might closely parallel Jeff's experience. Both individuals utilize a wide array of technical and marketing tools to solve problems for their customer.

If nobody sells, a terrible thing happens...NOTHING!"

This adage sums up very nicely the role of a professional salesperson in today's market. The sales effort generates essentially all revenue to run the business. Everything begins when you sell something. All salaries, from the top executive to the researcher, from delivery personnel to secretaries, are paid from what the salesperson sells. That is one reason why selling plays such an important role in most companies.

Technically, sales is a subset of marketing. Marketing is defined as anticipating the needs and wants of targeting customers and the process of helping customers meet those needs and wants...profitably. Sales involves understanding the market environment in order to spot opportunities, target market segments, develop a market strategy, and implement that plan. Product decisions, pricing decisions, distribution decisions, and promotion decisions are all part of the marketing strategy. The salesperson plays a key role in both understanding and communicating customer needs to marketing managers and still a more critical role in executing critical elements of the overall marketing plan.

For most companies, the sales effort is the primary (and most expensive) marketing tool. The salesperson is the primary communicator of the products and services offered by the company. Indeed, the salesperson often is a major source of "added value" that truly differentiates the company from the competition in the eyes of the customer. It is usually the salesperson who delivers the technology. Research shows that, in general, farmers today rely even more heavily on the salesperson as their source of technical information than they do traditional sources, such as their county extension agent.

Most agribusinesses believe that there is little loyalty to a "brand" in today's market. However, there is often a great deal of loyalty to people--based on a strong relationship that develops between the field marketer and the customer. The salesperson can become the critical, differential advantage for the company in any given market.

The critical importance of selling skills to agribusiness came through loud and clear in a 1989 Agribusiness Education study done at Texas A&M University. Over 1,100 agribusiness managers reported that more emphasis was needed in selling and marketing skills. Another study of 177 midwestern agribusiness managers ranked sales and marketing experience as the first and second most important factors for employment in their firms. Clearly, the salesperson is a critical link in the marketing strategy of most agribusinesses whether they be local retail stores or large multinational corporations.

Preparing For A Career in Agrisaales

Today's professional agrisaalesperson is a far cry different from the "peddler" of by-gone days. To be a successful field marketer, one has to be well grounded in technical agriculture, have a solid understanding of business, and possess solid people and communication skills. This kind of background is in high demand. Jobs for college graduates with this type of training seem to be strong and are likely to remain so for a number of years. A recent study released by the USDA Office of Higher Education (1988) predicted "an 18 percent annual shortfall of qualified marketing, merchandising, and sales personnel" through the mid-nineties.

There also seems to be a strong demand for agribusiness sales and service personnel without a four-year university degree. While information on the demand for high school and community college graduates with an agricultural background and experience in agribusiness is not readily available, many agribusiness managers regularly lament that the lack of qualified sales and service personnel is one of their most significant problems. Their customer's growing need for service from competent, technically qualified professionals demands having the right people in their local agribusinesses.

Students interested in the sales and marketing field can begin their preparation through a combination of classroom and extra-curricular experiences. Education provided in high school agriculture classes is a good place to start. Courses in business and communications are a strong complement. Leadership and communication skill development through clubs and agricultural education activities are extremely valuable. Real-world experience that comes from working with agribusiness on a part-time basis is invaluable.

Those students who are interested in marketing jobs--corporate level people who develop the strategies and manage the company resources made available to salespeople, will need either an advanced degree specializing in marketing or several years of successful field marketing experience. Many agribusiness professionals believe it is essential to have successful field marketing experience before one is qualified to move into higher level management positions. These individuals argue that it is critical to understand the customer and how the marketing function works before they are put into a position of making decisions that will affect the total company.

The Bottom Line...

The bottom line is that the sales function has changed dramatically in the past few years. Today, it is a high tech job that requires a wide range of business, communication, and market-

(continued on page 20)

Agrimarketing - A Tool Every Agriculture Student Needs



BY SHEILA BARRETT
Ms. Barrett is an agriculture teacher at Fullerton High School, 201 E. Chapman Ave., Fullerton, CA 92634.

Marketing is a vital component in today's agriculture curriculum. In fact, over 35% of the jobs that our graduates seek are in the area of agricultural sales and service. In order to meet this employment need, we must teach our students the proper method of marketing products so that when they enter the work force, they will be productive assets to the agricultural industry and society.

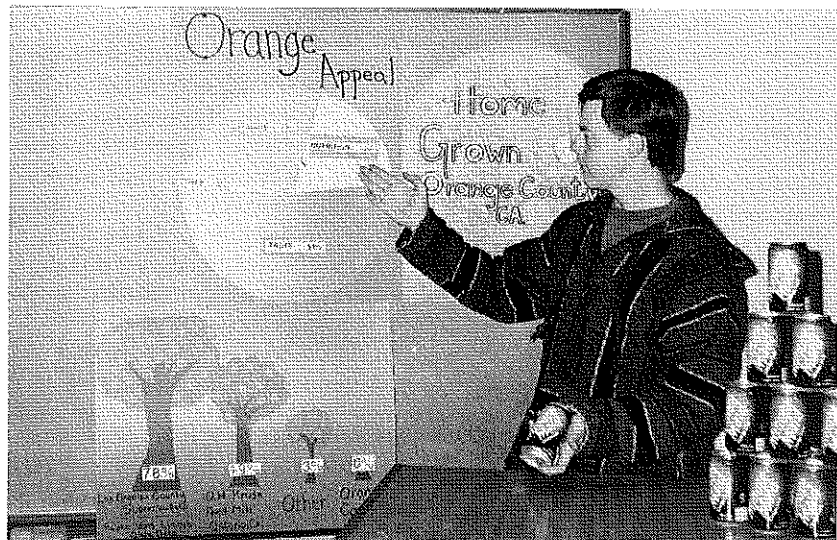
Classroom Infusion of Agrimarketing

Teaching the Concepts

The first step is to focus on fundamental marketing concepts. One of the best documents to teach these concepts is, *Marketing - Reaching Today's Consumer*, distributed by the Wisconsin Milk Marketing Board. Throughout this instructional packet, students learn concepts of marketing that include law of supply and demand, marketing costs and margins, and marketing organization. With this knowledge, students are better equipped to make decisions as they begin to understand the forces of the marketplace.

Marketing Options

During the second step, students learn the various options available when marketing a product. This information focuses on product, place, price, and promotion. At Fullerton High



Fullerton High School junior Jeff Cochran, presents his market plan on oranges. As a result of the presentation, students are better able to enhance the plan and gain self-confidence.



Visits to the mall provide students with the opportunity to observe and critique professional window displays.

School, students learn marketing options through the Agricultural Business Management course. When students enter the course, the first assignment is to develop a mock business and present the business to a class City Council for acceptance into the community. During the first semester, the students learn how to keep records using their fictitious business. During the second semester, the business is then used to actually develop a marketing strategy for a given product.

The first marketing option Fullerton students learn to alter is the product. Students must create a sample product sold in their business and design the label and product package. Once formulated, students deliver an oral presentation in which they explain the product design.

When studying place, the student identifies the specific locations which might be profitable for the product to be sold. Once the list is generated, each student then researches which option would be the most profitable. Factors which the students base their decision include transportation cost, space available for the display, and customer make-up of the store. Again, at the conclusion of the research the student presents an oral report outlining the possible selections for product placement and rationale for the selection of the desired sites.

The next is price. Of all components, price is the most difficult option for the student to



Marinez, Fullerton High School senior, proudly presents her window display created for Hickory Farms.

grasp. In order to help students understand this concept, they first research the current average market price of their product. Then students must decide if they should be above, below, or at the researched price and outline the justification for the decision. Finally, the students determine methods of developing a sale and explain when this method of price reduction would be appropriate. The information gathered regarding price is summarized in a written report and submitted to the instructor.

Finally, we look at promotion, the most creative and enjoyable aspect of marketing. During this section, the students are responsible for developing a magazine advertisement and a videotaped television commercial. In addition, the class takes a field trip to the local mall, evaluates various window displays, and constructs a window display for their businesses.

Through this rewarding learning experience, the students understand their options as they



"Freshman Survival Pack", created by Jeff Mathy and Robert Whiteford, served as a super product for which these Fullerton students were able to develop their marketing plan.

begin to develop an entire marketing plan. Textbooks that have been the most beneficial in teaching specific marketing techniques include the Wisconsin Milk Marketing Board curriculum, Marketing Plan Project Instructional Packet, John Deere's *Farm and Ranch Business Management* text, and Samson and Little's *Visual Merchandising* text.

The Market Plan

The final step in putting the package together is for students to develop their own market plan. Each student is provided materials from the Market Plan Project Instructional Packet, and they are required to develop a plan for their chosen product.

We begin with a market analysis. Students develop a survey which they believe will describe the buyer, the competition, their own product, and possible trends. The survey should be no more than one page, and the questions should be answered in two to four minutes. Once developed, the students conduct the survey. In addition, the students must obtain information on their competitors. I request that they obtain brochures on each of the primary competitors. Finally, using business magazines and newspapers, the students must predict what they believe will be future sale trends of the product. Once all of this information is gathered, students develop a one to two page description of the market and present their findings to the class.

The next step is for each student to develop a business proposition. Through this activity, the student will provide an overview of what they believe can be altered in order to better market their product. I stress to the students that their proposition cannot only be a change in promotion, but rather they must focus on product, place, and price as well. This component of their plan should begin with their assumptions - what conclusions they can draw from the market analysis. In addition, the business proposition must focus on which consumers they are going to target and what measure they are going to take to increase the customer base. The conclusion of the business proposition is the statement of specific, measurable objectives. Again, the business proposition is written up in a one page report.

The class then works on the action plan. Students specifically describe what they are going to do in order to accomplish the objectives which they laid out in the business proposition. In addition, they describe specifically what they are going to complete in order to alter the product, place, price, and promotion. This is the most difficult step in developing the market plan. The students must combine many thought processes and complex concepts in order to develop a realistic plan. As a teacher, I emphasize to the students that if they keep it simple (one or two changes), they can create →

a successful market plan.

We now move into the budget portion of the plan. Rather than having each student labor over the precise figure, I break the students into groups and have one member from each group contact a local marketing agent that works specifically with developing budgets. That student is then responsible for working with the group to share all the ideas on how a budget can be broken down so that accurate figures can be easily obtained.

The final step is evaluation. In this simple paragraph, the students describe how they will determine if their plan was successful and point out methods they would incorporate if change is necessary.

Once each of the five components of the market plan is written, I then have the students develop their oral presentations. We discuss the different methods they can use to visualize their presentation (posters, overhead, displays) and then watch a video of selected Fullerton students' presentations from previous years.

As an instructor, this process is very rewarding, because every student succeeds. When I watch students give their presentations, I am always amazed by the progressive ideas that these high school students are able to implement. In addition, each student is able to develop a program that best challenges the student! Without a doubt, at the completion of the course each student has mastered the concepts and can repeat the marketing process.

FFA/SAE and Agrimarketing

Agrimarketing is an essential component to every successful agriculture program. At Fullerton, agrimarketing has gone beyond the traditional fund-raising activities and thank you letters from buyers. Current projects that the elected leaders have incorporated into their marketing plan include a semi-annual newspaper, Fullerton Beautiful, Adopt-a-Business, and Farm Tour.

Each year the second year agriculture class, as part of a communication/leadership unit, selects stories, writes articles, and edits the publication. The 20 page newspaper is then distributed to school officials, advisory board members, State Department of Education officials, teacher educators, university officials, local businesses, and parents. As a direct result of the *Fullerton Times*, the community and state is made aware of the accomplishments of the chapter on the local, regional, state, and national levels. In addition, due to the fact that the publication is student generated, the document helps to enlighten readers as to the abilities of the students in the program and is a great tool in the marketing process.

Each Palm Sunday the City of Fullerton hosts Fullerton Beautiful. During this annual

spring celebration, selected homes in the community open up their landscaped yards for view by the participants. Fullerton agriculture does not only serve as a selected site, students also coordinate the Open House festivities and utilize the opportunity to market the entire program. In addition to the 12 landscaped plots designed and installed by agriculture students, floriculture students coordinate a fresh flower show that includes over 60 arrangements, bouquets, and corsages. FHS agriculture students conduct tours of the farm, organize a petting zoo for children, and coordinate computer demonstrations. Furthermore, an agriscience fair with over 30 projects is on display for the 1000+ visitors to the agriculture facility. By having students capitalize on their marketing knowledge, Fullerton Beautiful has become a tremendous community marketing success.

Each year Fullerton FFA officers select ten businesses which then become part of our Adopt-a-Business program. The designated individual within the business is invited to each major FFA function. In addition, we send them the *Fullerton Times*, a holiday greeting card, and information bulletins throughout the year to keep them abreast of activities in the Fullerton High School agriculture program. These businessmen and women often become the individuals who purchase student projects and provide employment positions. Through this program, we are marketing the activities of the FFA and the projects, and we are working towards building a bridge that must exist between the FFA chapter and the community.

Farm Tours is a program that has been implemented on many different levels as a result of the urbanization in Southern California. One of our most popular programs is Preschool Tours. During National FFA Week, over 700 preschool and elementary school children visit the farm and participate in mini-lessons presented by agriculture students. This program, in addition to enhancing high school students' communication skills, provides opportunities for many pre-high school students in regards to the world of agriculture. Furthermore, Fullerton High School has established weekly farm sales in which farm fresh eggs, as well as fresh floral displays, are available for purchase. Through the farm tours and sales, students at Fullerton High School have been able to effectively market the program and their SAE projects.

Through the marketing of FFA and SAE, Fullerton High School has been able to inform the local community about happenings within the agriculture facility. As a result, the community gains an appreciation for our agriculture program, as students demonstrate their marketing tools.

Summary

Successful integration of agrimarketing in
(continued on page 23) →

Using FFA Activities to Teach Agrimarketing



GREG EGAN
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with the National
Center, Alexandria, VA
4139.

Ahhh...the last bell of the day has rung, you've just popped open an ice cold beverage, and you have a quiet moment to peruse the mail. Have you ever stopped to consider why you buy the type of soda you do? Or the type of car you drive, or just about anything? Almost all purchases are influenced to some degree by marketing.

A major misconception is that marketing and advertising are one and the same. They aren't. Advertising is just one of the many components of marketing. Processing, packaging, distributing, pricing, and merchandising are all part of the marketing process.

Did you know that marketing employs more people in agriculture than any other area? In fact, 32 percent of agricultural jobs are in marketing, merchandising, and sales (USDA).

Are you adequately preparing your students for this exciting and expanding career area? If so, you can turn the page. If not, this article will provide guidance on where to start and give examples of how to use the National FFA Organization's competitive programs to give your students hands-on experience in marketing and sales to complement their classroom work.

You're still with me. That must mean you would like to find out more about teaching agrimarketing. First, you'll want to find out what curriculum materials and opportunities for inservice training are available. Contact your state staff and review materials developed for use in your state. Also, the National FFA Organization has developed a set of instructional materials complete with handout and transparency masters. For a free set of these materials, see the end of this article.

The introductory portion of FFA's instructional materials covers the ever-evolving face of agriculture, where marketing fits into the picture, careers in marketing, and educational levels necessary for each. The next section of the materials covers economic fundamentals such as capitalism, supply and demand, competition, and consumer choices. From there, the students will learn how to develop a marketing plan, leading to competition in the marketing plan project. The recommended classroom time to complete the teaching plan is 12 hours.

Ray Chewleski, FFA advisor from Presque Isle, Maine, began teaching marketing in 1975.

His team took home top honors in the Marketing Plan Project Competition in Kansas City this past year. He says, "This competition gives students a real look at the community. They have a chance to practice what is learned in the classroom."

The Marketing Plan Project competition consists of three parts: a written plan, a live presentation, and a question and answer period. The written plan includes an analysis of the market, a business proposition, an action plan, the projected budget, and an evaluation.

Chewleski says, "I've found that students respond to real-life situations with a great deal of enthusiasm, rather than developing a simulated model." His team developed a plan to market a local commodity- salmon. The tanks are in operation today. A modified example of Presque Isle's winning marketing plan entitled, "SALMON: From Tank to Table," appears in the accompanying box.

To get your students involved, have students prepare marketing plans based on:

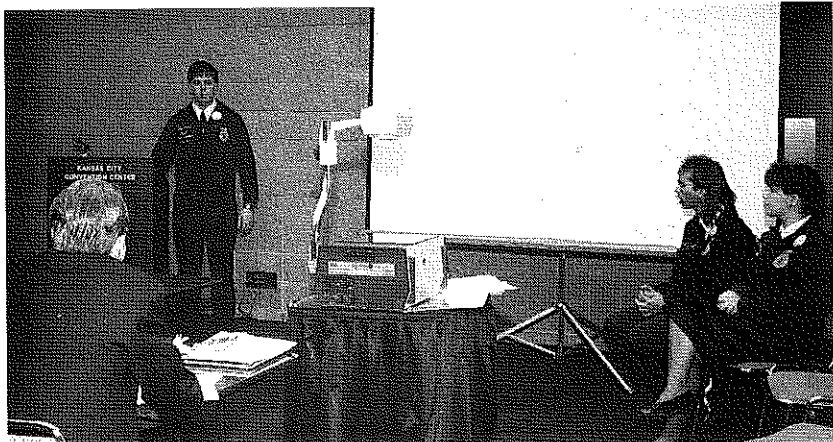
- their SAEs
- local businesses or industries
- chapter fund raisers
- chapter facilities

Chewleski says they do marketing plans for every type of project that the chapter plans on doing. For instance, one of Chewleski's students prepared a marketing plan for raising gold fish. A market was identified and plans are being developed to use one of the school tanks to market 1,200 goldfish, which translates to 12 cents per fish or \$144 a week.

A related competitive event you can use to →



FFA Marketing Plan presentation by FFA members from Walla Walla, Washington, at the 1992 National FFA Convention.



Kentucky FFA members present their marketing plan in National FFA competition.

enhance student's classroom experience is the Agricultural Sales Contest. Ken Johnson, agriculture instructor in Gilbert, Arizona, coached his team to second place in the national contest last year.

Johnson says, "The Agricultural Sales Contest brings more life into the agribusiness curriculum. It causes the students to get out and research products on their own. Their eyes are opened up to all the factors involved in marketing an agricultural product, and this helps them realize there is a lot more to marketing than selling a product over the counter."

The Agricultural Sales Contest helps students:

- understand and demonstrate the agribusiness sales process
- apply advertising and promotion principles to agricultural sales
- build customer confidence in individuals and products
- use market research data to establish sales goals and target customers
- write a cover letter and complete a job application
- develop their interview skills
- identify career options in agricultural sales

For more information on FFA's Marketing Plan Project Competition and instructional materials, and/or the Agricultural Sales Contest, contact Greg Egan at National FFA Organization, P.O. Box 15160, Alexandria, VA 22309-0160, 703/360-3600.

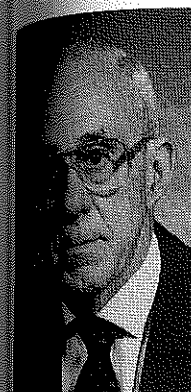
The Marketing Plan Project is sponsored by Rhone-Poulenc, and the Agricultural Sales Contest is sponsored by Asgrow Seed Company, both as special projects of the National FFA Foundation.

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References

- _____. (1988). Employment Opportunities for College Graduates in the Food and Agricultural Sciences. Washington, D.C.: USDA.

FFA Commodity Marketing Activity



MARK MOORE AND GREG DAY

Mr. Moore is editorial director, Stewart-Peterson Advisory Committee, West. Mr. Day (shown) is a specialist, agricultural business education, Tisd., MN.

Five years after its inception, the FFA Commodity Marketing Activity continues to grow in size and scope, offering students the opportunity to learn about a critical aspect of farming--making timely and efficient marketing decisions using all available tools.

For years the agricultural community has focused on the production end of agriculture, measuring success on who grew the most crop and who had the best yields. Left out of this "bigger is better" thought process was the key ingredient to the agricultural operation--marketing. No matter how great the yield, it is difficult to exchange higher yields for poor marketing decisions that result in lower, and in some cases negative, bottom lines. That's why we consider the Commodity Marketing Activity such a vital aspect of today's agriculture program. This program focuses on the marketing aspects of farming. It is not simply a contest that teaches students about the use of futures and options, although that is a significant goal of the program. The activity is developed to use all marketing tools available to the farmer in marketing commodities. From cash sales, to futures sales, to option strategies, students buy and sell just as a farmer would, only the student is not using real money. The Commodity Marketing Activity, developed by the Stewart-Peterson Advisory Group, the National FFA Foundation, the Chicago Board of Trade, and the Chicago Mercantile Exchange, uses real-life situations in which marketing decisions are made. This is not simply a program that has a right or wrong answer. Each year is different, and marketing decisions are adapted according to the market forces in place at the time of the contest. That is the portion of the contest that we find the most exciting. Because it is based on market activity at the CBT and CME, students are able to use real-life marketing tools (the local paper, a Data Transmission Network quote screen, world news events, etc.) to make their decisions. Not being a static event also gives students the opportunity to learn that making marketing decisions is constant, and being well informed makes making those marketing decisions more important.

Agriculture students may participate in one or both levels of the competitive activities designed to develop their understanding and

application of economic principles and commodity marketing strategies.

The Chicago Board of Trade sponsors the Commodity Challenge. Participants select and study a commodity of their choice and complete a self-directed report provided by the sponsor for review by an impartial evaluation committee who ranks the applicants from their state. State winners receive a \$100 savings bond, and their application is forwarded for competition with state area winners from specific regions. Area winners and their mentor/advisor participate in a unique seminar in Chicago, hosted by the CBOT. One of the highlights of the program is an opportunity to participate in a trading session on the floor of the CBOT. Participants must register with the CBOT by February 1 to be eligible to compete. For the 1993 competition, 2526 FFA members, representing 206 chapters in 22 states enrolled.

In our discussions with several teachers throughout the country that participate in the program, we have found that several students also take the work home with them, discussing the markets with parents at the dinner table. We find that this is an added benefit that no one could have planned. The program gets the student involved, realizing that farming is not just about growing crops. Following is a brief description of how the marketing part of the program works.

Each student team, made up of four to six students each, is given a model farm that must market 25,000 bushels of corn, 10,000 bushels of soybeans, 10,000 bushels of wheat, two contracts of hogs, and two contracts of cattle during the contest. The goal: earn the highest possible value for their commodities. A maximum of 30 points is awarded to the team with the →



Team members develop the ability to work cooperatively with others in problem solving, decision making, and negotiating the market strategy. (Photo courtesy of Willmar AgTechnology Department)

A Modified Version of the Presque Isle Marketing Plan

"SALMON: From Tank to Table"

Analysis of Market: Several options for utilizing the aquaculture laboratory existed, including selling fish wholesale or retail, stocking private and public bodies of water, raising tropical fish, and raising bait fish. Retail sales of Atlantic salmon were selected because of the ease of sales and licensing, reduced transportation, and a high demand.

Business Proposition: We propose to raise Atlantic Salmon to a size of five to seven pounds. We plan to have a store open every Friday afternoon throughout the year. Several measures are currently in place that facilitate the installation of our marketing plan. The school has provided the space to conduct our production and business. The continued support of the administration is necessary for the success of our plan. We have taken steps to meet governmental regulations concerning the production and sale of fish.

Action Plan: To achieve our goal of letting the customers select their fish, we designed our production room to facilitate customers coming through without disturbing the fish or our equipment. The sales room is next to this room, where we will prepare the fish, wrap it in butcher paper, and collect cash from the customer. As well as getting a fish for dinner, they will also get a tour of a unique and novel aquaculture operation that connects the community to the school program.

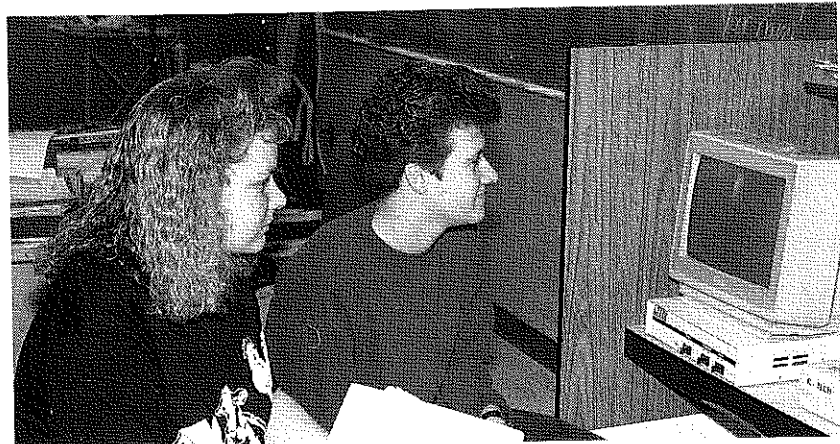
Projected Budget: We are basing our budget on an expected yield of 200 pounds per tank each year for a total of 1,000 pounds. Feed costs are based on 2.5 pounds of feed per pound. Our total equipment cost is depreciated using straight-line depreciation over a seven-year period.

Evaluation: To evaluate the success of our marketing plan, we will be looking at each step of our marketing strategy as we proceed. We will keep track of our sales and their frequency, the costs involved in raising the fish, and the price received for the fresh fish. We will also maintain contact with area grocery stores to ensure that we maintain a competitive price. At the end of each quarter, we will assess our sales and expenses to check that we are operating a profit-making business. If we are not, we will look at ways to change our business to operate with a margin of profit.

highest net dollars (total revenue, minus expenses). An additional 20 points is earned in market action points, which reward teams utilizing a variety of marketing alternatives. Points are awarded as follows. For each commodity in which a team executes an order, they receive three points. A maximum of 12 points is available in this phase of the competition. For each futures or options transaction which is entered and exited prior to the end of the competition, a team receives two points from a total of eight points available.

Each team, using a toll free number, phones their weekly decision to their broker (the sponsor). Team members are required to calculate the cost of implementing each of the strategies selected during the eight-week marketing activity.

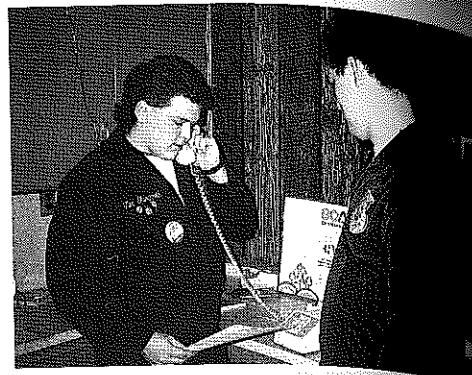
Teams are allowed to use a wide variety of



Participants check daily market prices on the monitor leased from D.T.N. The data is useful in making informed decisions on the most appropriate marketing strategy. (Photo courtesy of Pipestone Agriculture Department)

marketing alternatives, including futures, options, and cash sales. The students use current market prices and information to make their decisions. Teams that rate the highest, based on the financial success of the model farm, are then tested to determine just how much they've learned during the marketing activity. The sponsors mail a 50 question closed notebook and a 50 question open notebook examination which evaluates the participants' knowledge of the markets, as well as their accuracy in recording factors impacting the market during the trading session. Scores from both exams are combined with the earnings from the transactions to determine the final ranking of each team. A \$300 award and plaque are provided to the high scoring team. All participating schools receive a certificate.

Teachers report that the opportunity to be involved in a relevant, experiential learning activity motivates students to study and to learn the intricacies of commodity marketing. In addition to incorporating critical and higher order thinking skills, the concepts of interpersonal relations, cooperation, team work, decision making, problem solving, persuasion, and



Communicating the week's order to the broker. Each team must make at least one marketing transaction weekly during the 8 week trading session. (Photo courtesy of Wisconsin Ag Technology Department)

negotiation are developed. Realism in learning is achieved through the required report of weekly transactions to a real person. The activity provides an exemplary opportunity to integrate and apply knowledge in a meaningful, relevant, learning experience. Lastly, participation increases the involvement of parents and representatives of agriculture and agribusiness in the instructional program. Students also learn how national and global conditions impact markets.

Originally started as a pilot program in Minnesota with 40 schools and 350 students participating, the project has mushroomed to 400 schools and over 4,000 students in 21 states. We believe that there are two goals of the Commodity Marketing Activity. The first is for students to receive real-life experience in using markets, including how daily price changes affect the profit of a farming operation. The second goal is to help students determine what factors are important in making good marketing decisions and how to rationalize those decisions on a day-to-day basis. Building a good market understanding at the high school level will help make future agribusiness professionals keenly aware of how to use the commodity markets to more profitably market commodities.

For additional information contact Roy Peterson, Stewart-Peterson Advisory Group, 304 South Main, West Bend, WI 53095. Richard Jelinek, Education and Marketing Manager, Chicago Board of Trade, LaSalle at Jackson, Chicago, IL 60604, or Paul M. Day, Program Specialist, Agriculture/Agribusiness Education, 725 Capitol Square Building, 550 Cedar Street, St. Paul, MN 55101.

Note from the Editor:

In the January edition the books listed for review had two books with an incorrect copyright date. *Modern Agricultural Mechanics* and *Mechanics in Agriculture*, published by Interstate Publishers, Inc., were recently updated. The correct copyright date for both books is 1992.

Economics Program Challenges Students

RICHARD JELINEK
CHRISTINE STEBBINS
Jelinek is senior product manager and Ms. Stebbins is a sales manager, Chicago Board of Trade, 141 W. Jackson, Chicago, IL 60604.

Every year more and more teachers and students from across the U.S. and Canada are discovering a new and exciting way to teach and learn economics. It's called Commodity Challenge.

Commodity Challenge is a program designed to give students a well-rounded background in economics, using world events and the commodity markets as educational tools. By researching a commodity of their choice through a series of activities, students develop a strong working knowledge of supply, demand, and price discovery in a fun, practical way.

Sponsored by the Chicago Board of Trade, Commodity Challenge has been nationally recognized by the National Council on Economic Education, National Council for the Social Studies, National FFA Foundation, and the Canadian Foundation for Economic Education as an exciting educational program.

More than 600 schools throughout the U.S. and Canada participate in Commodity Challenge each year. What is interesting about Commodity Challenge is it encourages teacher flexibility. Teachers have done everything from presenting the material in their classes to establishing clubs or assigning the project as independent study, since the material is self-explanatory. And students have enjoyed the learning experience as well.

As Amy Killian from Onalaska High School, Onalaska, Wisconsin, said, "Commodity Challenge was one of the best learning tools a college-bound student could have. Not only does it provide an excellent course in economics, it teaches participants the true meaning of hard work, dedication, and focus." Amy is one of the more than 45,000 students who has participated in Commodity Challenge since it was piloted in 1988.

The Specifics

All students who register for Commodity Challenge receive a booklet describing how they can be a part of the program. The first step is choosing a commodity or financial instrument traded on a futures exchange, such as corn, soybeans, wheat, T-bonds, or whatever is of interest to them to study. Students are highly encouraged to follow their commodity in the newspaper to find out what economic factors

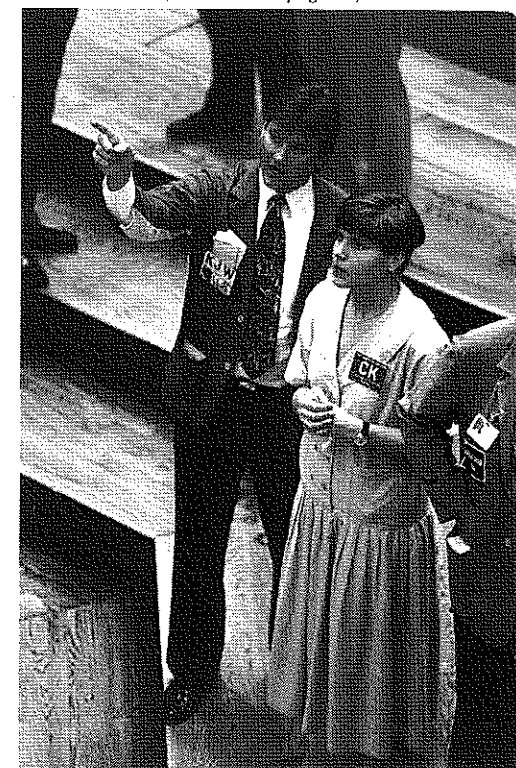
might influence the price. They then complete a series of activities designed to teach the basics of supply, demand, and price discovery.

Once students learn the basics of supply and demand, discover why prices move, learn to read the business sections of newspapers, and see how prices are reported, they are ready for a five-week trading exercise. By paper trading the commodity they have been studying and continuing to research the fundamental factors affecting prices, students begin to see a bigger economic picture.

At the end of the research activities and trading exercise, students complete a summary report. The student text outlines the information to be included, but creativity and individuality are encouraged in writing the final report.

Students who do an outstanding job completing Commodity Challenge have an opportunity to receive several awards, including U. S. savings bonds and a three-day, educational and cultural trip to Chicago. The all-expense-paid trip

(continued on page 20) →



Cassie Kormylo, Boise High School, Idaho
Commodity: Silver
Member: Kevin Waring

Teaching Agriscience



BY SHEILA BARRETT
Ms. Barrett is an agriculture teacher at Fullerton High School, Fullerton, CA.

Fullerton High School taught agriscience many years before I started my teaching career. However, it was not until 1985 that the teachers began labeling their curriculum "agriscience". As a result of this labeling and curriculum restructuring process, the program has received cross credit for life and physical sciences, as well as university elective credit.

Fullerton High School is not alone in its relentless drive to incorporate science into the agriculture classroom. Schools throughout California and across the nation have begun their agriscience journey. However, many teachers request assistance getting started and developing techniques which will work best in their classes.

The following laboratory exercise has been successfully utilized at Fullerton High School and is one of the introductory labs which can teach students relevant agricultural concepts and scientific skills.

Nutrients in Food/Feeds

Most agriculture instructors teach a unit on feeds and feeding. During this unit we explain to students the types of feed we should feed to our animals, of what the feed is composed, and how the animal breaks down the feed in its digestive system. In the following laboratory exercise, the students will learn the composition of the feed in this simple, thought-provoking lesson.

Purpose

In industry, agricultural scientists perform nutrient analysis on new feeds to determine the nutritional value of the feed. In this experiment, students will perform similar chemical analysis on feed samples in order to identify the nutrients contained in each sample. During the lab, students will be testing for water, sugar, starch, fat, and protein.

Materials

Safety Equipment - goggles and a lab coat

Agricultural Products - whole milk, alfalfa, corn, barley, oats, sweet feed, and brown bags

Science Equipment - hot plate, large beaker, test tubes, test tube holder, test tube rack, and a crucible

Chemicals - Benedict's solution, Lugol's iodine, and Biuret reagent

Procedure

Caution: Put on safety goggles and a lab apron. Leave them on for the entire investigation.

Helpful Hint: It works best to use ground feed so that the chemicals react with the feed nutrients and not just the seed coat.

For Best Results: Divide your students into groups of four people and have stations set up with enough materials so that groups do not have to leave their stations in order to conduct all five tests.

1. Test for Water

Place a feed sample in the crucible. Using a test tube holder, hold an inverted test tube over the crucible. Heat the sample until only a residue remains. Any fluid that condenses on the glass surface of the test tube is considered water. If no condensation occurs, the sample does not possess water. Complete this test on all six samples.

2. Test for Sugar.

Add 5 ml (10 drops) of Benedict's solution to a test tube containing a feed sample. Heat gently in a boiling water bath. The solution will turn green to brick red depending on the amount of sugar. Complete this test on all six samples.

3. Test for Starch

Place a drop of Lugol's iodine on a feed sample. The drop will turn blue-black if starch is present. Complete this test on all six samples.

4. Test for Fat

Rub a sample of a solid food or place a few drops of a liquid food on a section of brown paper bag. Hold the paper to the light. If the food contains fat, you will see a translucent spot that will not disappear even when dry. Complete this test on all six samples.

5. Test for Protein

Add 2-3 drops of Biuret reagent to a test tube containing a feed sample. A color change from pink to purple indicates a presence of protein. Complete this test on all six samples.

Observations

As the students are completing the laboratory (Continued on page 20)

FFA Advisement "What If I Don't Know....."



BETH SPENCER
Spencer is an agriculture teacher at Tri-Valley Central High School, Grahamsville, NY.

"The owl is a time-honored emblem of knowledge and wisdom. I hope that my advice will always be based on true knowledge and ripened with wisdom." These familiar words of the FFA Official Opening Ceremony are well known to the thousands of agricultural educators and FFA advisors who work with FFA members across the country.

But let us pause for a moment and examine the thoughts of individuals who, in writing the opening ceremony, used the word *knowledge* in the response of the FFA advisor. Certainly, one can only imagine the array of opinions that may be offered on what is meant to have knowledge as an FFA advisor. No matter what the opinion, an FFA advisor should recognize a certain degree of self-responsibility and accountability in acquiring knowledge about FFA and FFA programs. The knowledge sought will then enable FFA advisors to provide for achievement with students, communicate a purpose for the local program, and establish a supportive relationship with the communities they serve.

So what responsibility for acquiring FFA knowledge does an FFA advisor possess? The responsibility is unlimited! How often as advisors have we experienced our own colleagues simply say, "I didn't know when the awards were due", or "No one told me the rules had changed", or "How was I supposed to know what time the contest started?", or "How can we compete against your chapter when you always win?" Again, the all-too-familiar questions relate right back to the individual accountability of the FFA advisor seeking and acquiring knowledge and being well-informed about the FFA and its many diverse program offerings. Yes, it is a fact that those FFA advisors serving in leadership roles and making decisions about FFA programs have a responsibility to inform and share knowledge to their peers regarding due dates, changes in contest and award programs, new programs, and expectations or qualifications for "winning" in FFA. The ultimate responsibility, however, still lies with the individual FFA advisor being accountable to acquire the appropriate knowledge and seek the answers to the aforementioned familiar responses and questions, rather than shift the blame or claim they didn't know.

Student achievement, recognition, and suc-

cess in the FFA bear a direct relationship with the FFA knowledge of the advisor. So where or how does an advisor, especially a new or beginning teacher, acquire FFA knowledge? Agricultural educators must start by reviewing their own personal philosophy of FFA and accepting that FFA is an integral part of classroom instruction in order to teach/advise students/members about FFA activities and programs. Agricultural educators and FFA advisors cannot honestly respond, "my students never win," if they don't accept FFA as an *integral* component of the instructional program, even though some students are not interested in FFA. Agricultural educators/FFA advisors must start by believing that it is important to teach and share their knowledge of FFA opportunities as a part of the classroom instruction. After all, what responsibility do FFA advisors have to acquire FFA knowledge if they don't believe they must share and impart the knowledge and opportunities of the FFA as a part of classroom instruction?

But back to the question—how does an FFA advisor acquire knowledge about the FFA and its programs, changes in a contest, and expectations for students to win? They must read; attend workshops, conventions, professional conferences, and FFA meetings above the local level; make phone calls to other advisors and FFA district, state, and national officials; and *ask questions!* Then comes the "What if's." "What if I don't know who to call?" Call a nearby FFA advisor and ask questions! Call your supervising teacher or teacher educator at the university and ask questions! Call your State FFA Office and ask questions? "What if I don't know..." *ASK QUESTIONS!*

Advising members of the FFA begins with the FFA advisor. Accepting the responsibility and accountability to be well informed, competent, and knowledgeable about the FFA and FFA program offerings is the job of the FFA advisor. Developing knowledge and understanding of FFA programs, as well as students on an individual basis, will enable the advisor to match FFA opportunities with students and help them recognize areas where they may achieve and be successful. Successful FFA advisors provide guidance to students that is "based on true knowledge and ripened with wisdom."

Economics Program...

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is reserved for students and their teachers submitting the top projects in a state-wide competition. During their stay in Chicago, state winners see the markets in action, attend classroom sessions on commodity markets, and see several Chicago sights. One of the highlights of the trip that students enjoy the most is standing in the



Karl Jorgensen, St. Paul Public School, Nebraska.
Commodity: Feeder Cattle
Member: Lawrence Corbin

trading pits on the exchange floor with Chicago Board of Trade members.

David Roebel of Saint Maria Goretti High School, Hagerstown, Maryland, was one of 45

state winners who attended the 1992 Commodity Challenge award program, held last June 27-30. In his words, "This project taught me a lot about the law of supply and demand. I got to see it in action rather than just reading about it in a book."

To Get Involved

This year's Commodity Challenge program is well underway with 48 states and Canada participating. While this year's enrollment period is closed, there's always the 1993-94 school year.

To join the challenge, the Chicago Board of Trade requires teachers to register each student who wants to participate in Commodity Challenge. The annual registration fee is \$1 per student. Once students are registered, the Chicago Board of Trade sends the teacher all the necessary materials and information on Commodity Challenge, including one text for each student registered. Teachers also receive an informational guide giving them all kinds of ideas and suggestions for the program.

If you'd like to find out how your school and students can participate, call Richard Jelinek, Chicago Board of Trade senior marketing manager, at 312/435-7206.

In addition to Commodity Challenge, the Chicago Board of Trade has a variety of other materials explaining how the futures markets work. For those interested in learning more about the agricultural markets, call the Chicago Board of Trade at 312/435-3558 and ask for the agricultural publications catalog.

Internationalizing Agricultural Education - A Rationale



ROBERT A. MARTIN
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The need for developing an awareness of the global nature of the agricultural industry has become one of the major issues of our time. It has become increasingly apparent that if people are to be considered educated in agriculture, they must be cognizant of the interrelationships of various agricultural systems and the governments, cultures, and societies in which they function. It is no longer sufficient to know how to produce food and fiber and conduct or manage the many tasks in today's agricultural industry. Development and enhancement of one nation's agricultural system is unavoidable, interwoven with those of other nations. If these developments and interrelationships are to be successful, it is critical that students of agriculture and agricultural educators learn as much as possible about systems of agriculture in cultures and societies around the world.

The basic mission of agricultural education is to foster human development using agricultural knowledge and skills as the context for learning, leading, and achieving success in one's chosen educational and occupational endeavors. Pursuant to this mission is a growing need for students, adult learners, and educators the world over to develop an understanding of world agricultural systems and their impact on production, processing, and marketing of food and fiber locally, regionally, nationally, and internationally. In addition to these national needs for awareness, the total agricultural education family needs to improve relationships with organizations in other countries by developing new cooperative initiatives and enhancing present educational programs. Additionally, there is a critical need to expand educational programs in agriculture which take advantage of the rich cultural diversity of this and all other countries. All cultures have their roots in agriculture, and we must build on this heritage.

To address this need requires the creation of a systematic approach to program development. Specifically, the following major concepts provide the rationale for the development of a systematic approach to internationalizing agriculture education:

1. We need to vitalize current programs of agricultural education worldwide.
2. We need to internationalize every part of

the agricultural education family of organizations.

3. We need to develop cooperative relationships to start new initiatives in agricultural education worldwide.
4. We need to foster development of agriculture programs in other countries.
5. We need to develop new organizations and enhance existing organizations of youth and adult leadership (FFA, NYFEA, etc.) where needed and desired.
6. We need to share the successful experiences of youth development organizations in agriculture worldwide to test new programs, new activities, new ideas, and develop communication networks for carrying out these activities.
7. We need to share agricultural instructional strategies, activities, and programs with educators around the world.
8. We need to share curriculum materials and curriculum designs with instructors around the world.
9. Our students, teachers, farmers, and other agribusiness persons should be encouraged to have on-site experiences on a long and/or short-term basis in other countries.
10. We need to build an emphasis on cultural diversity into all educational programs in agriculture worldwide.

Selected Activities to Internationalize Agricultural Education Programs

Role of FFA

- Awards program for student involvement in international programs.
- Student exchanges.
- Work experience opportunities.
- Help establish/enhance youth organization in other countries.
- Youth leadership camps in other countries.

Role of Teachers

- Awards program for teacher's efforts at internationalization of program.
- Teacher exchanges. →

Teaching Agriscience

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exercise, have them record the findings for each test sample. The simplest method for recording their observations would be to have them develop a chart in which the feeds are listed in the far left column and the tests are labeled along the top. Then, as the students complete the laboratory, they should answer "yes" or "no" to determine if the nutrient existed within the feed sample.

Conclusions

The students need to explain the "so what" to the laboratory during the discussion of the conclusions. Some questions that students should address in this section include:

1. Why would agriculturalists want to know

what nutrients exist in each feed?

2. How could agriculturalists use this information wisely?
3. Of the feeds tested, which would you consider the most nutritious and why?
4. If you were going to complete this test again, what additional information would be valuable in determining a balanced diet for your livestock?

Summary

The agriscience journey can be one filled with rewards for the student, the instructor, and the program. Students can grasp an advanced awareness of the scientific role in agriculture while instructors can strengthen their curriculum resulting in a program meeting science graduation requirements.

for those who prepare themselves with the proper academic and real-world experience.

Reference

- (198-). *Employment Opportunities for College Graduates in Food and Agricultural Sciences*. Washington, D.C.: USDA.

Agrisales and Marketing

(continued from page 9)

ing skills. It has become a true problem solving profession, utilizing complex technology and people skills. There are excellent opportunities

Multiplier effect - locally, regionally.
 Teacher international internships.
 Teacher teach international seminars.
 Instructional materials development.
 Help establish local agricultural education programs in other countries.

Role of Teacher Educators

Curriculum development at undergraduate level with emphasis on international agriculture.
 Teacher educator exchanges.
 Teacher educator internships.
 Teacher teach international seminars.
 Assist in developing teacher education in agriculture.
 Collaborate in conducting research on agricultural education in other countries.

Role of Young Farmer Organization

Farmer to farmer exchanges.
 Work experience programs.
 Farmer leadership development programs in international seminars.

Role of Postsecondary Student Organization

Awards program for involvement in international efforts.
 Exchange programs.
 Work experience opportunities.

Role of State Supervisors

Exchange programs.
 Policy makers exchanges.
 Internships.
 Assist in developing agricultural education programs.
 Foster internationalization of state's curriculum.

Role of FFA/Agricultural Education Alumni

Exchange programs.
 Sponsoring FFA international efforts of students.
 Provide awards for international efforts of students/teachers.
 Sponsor travel seminars for alumni.

Role of The Council

Foster internationalization of all segments of agricultural education in U.S.A.
 Sponsor a periodic international conference on agricultural education.
 Formulate policy to infuse a global perspective into all programmatic efforts.
 Communicate and coordinate efforts to

internationalize all programs through task forces.

Initiate and support Task Force efforts to conduct internationalization efforts.

Network with other organizations to encourage educators to take advantage of international education opportunities.

Role of The FFA Foundation

Seek appropriate funding to support internationalization efforts.

Sell the concept of internationalization to potential sponsors.

Develop linkages with international development agencies.

Foster development of proposals that have international perspectives and components.

Summary

No other programmatic effort has as great a potential to revitalize and build enthusiasm for agricultural education than the focus on internationalization of all activities in the profession. There is a tremendous international frontier waiting for development of programs modeled after agricultural education/FFA as we know it in the U.S.A. To be prepared for development and expansion for this frontier, we must develop a systematic approach in which each of our organizations contributes. The opportunities are such that preparation for this international effort may have to occur at the very time we will be asked to help harness the agricultural education frontiers of the world. The challenge is here, the opportunity is here, we must act now. What are you going to do to internationalize your part of the profession?

Coming In May...

Laboratory Facility Improvement

- Facility remodeling
- Technology transfer
- Planning for change
- Agriscience facilities

Feature Column

- Research on teaching

Teaching Agrimarketing

(continued from page 5)

dent on maximizing its productivity of human resources. Students will

understand how human relations can impact the success of agribusiness and career advancement of employees.

Infusing Agrimarketing into the Curriculum

In order for agriculture teachers to make immediate advances in reorienting the secondary agriculture curriculum toward agrimarketing, an infusion of agrimarketing learning outcomes into all courses and at all grade levels must occur. For example, rather than teaching about the various breeds of beef in your ninth or tenth grade introductory courses, begin by studying where beef is produced in the world and what consumer demands are today. You may find that you have less time to study specific breeds, but that the breeds of beef studied reflect consumer and world market demands. Students need to be introduced to agrimarketing concepts in all introductory courses to inform them about career opportunities and motivate them to get involved in advanced courses that stress agrimarketing. Also, teachers have three new FFA activities that can be used as tools to provide unique learning opportunities in sales, commodity marketing, and market planning. In addition, students can pursue supervised agricultural experiences in a variety of areas that will prepare them for careers in agrimarketing.

Examples of job titles in agrimarketing include:

- Account Executive
- Accountant
- Advertising Manager
- Appraiser
- Commodity Broker
- Auditor
- Consumer Information Manager
- Business Manager
- Export Sales Manager
- Credit Analyst
- Food Broker
- Customer Service Manager
- Grain Merchandiser

Agrimarketing-A Tool Every . . .

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the classroom and FFA/SAE are essential for any progressive agriculture program. Through classroom instruction, students gain an appreciation for the necessity of marketing their products, whether it be a consumable good or themselves. In addition, the desire to incorporate marketing strategies moves beyond the classroom and quickly becomes an important consideration for FFA and SAE programs.

- Economist
- Forest Products Merchandiser
- Insurance Agent
- Financial Analyst
- Market Analyst
- Food Service Manager
- Marketing Manager
- Human Resource Development Manager
- Purchasing Manager
- Policy Analyst
- Real Estate Broker
- Retail Manager
- Sales Representative
- Wholesale Manager
- Technical Service Representative
- Government Program Manager

Teachers Hold the Key

For agrimarketing to be infused into the curriculum, teachers must act as change agents in the process. This will require that model programs be established, such as the East Magnet High School for Agribusiness and Environmental Sciences in Kansas City, Missouri. More importantly, all agriculture teachers must commit themselves to this challenge. States will need to provide opportunities for teacher inservice through courses and internships with industry. Also, preservice teacher education will need to adjust curricula to ensure that appropriate academic preparation and experiences are included in teacher training programs. The result of these efforts will be students who are prepared to meet the challenges that careers in agrimarketing hold for them and the increased ability of American agriculture to compete in the world marketplace.

References

- Beierlein, James G. (1988). **Farm Economics**. Cooperative Extension, State College, PA: Pennsylvania State University.
- Coulter, Stanton, Goecker. (1988). **Employment Opportunities For College Graduates in the Food and Agricultural Sciences**. United States Department of Agriculture, Washington, D.C.: USDA.
- Winterton, Joycc. (1992). **The Industry Too Big To Ignore**. Overland Park, Kansas: American Careers, Career Communications.

Agrimarketing is the one tool we do not want our students to graduate without!

References

- _____. (1987). **Farm and Ranch Business Management**. Moline, IL: Deere and Company.
- _____. (1990). **Marketing-Reading Today's Consumer**. Madison, WI: Wisconsin Milk Marketing Board.
- _____. (1990). **Marketing Plan Project - Instructional Packet**. Alexandria, VA: National FFA.
- Samson & Little. (1985). **Visual Merchandising - Planning and Techniques**. Dallas, TX: Southwest Publishing.

Agricultural Education's Role in Protecting Our Environment *

In the past decade a small, yet vocal minority has begun to make the public aware of the extent of the damage that has been done to our environment. With the dawn of the industrial age, the emphasis in all types of production was placed on maximizing output while minimizing input, and little thought was given to its impact on the environment. This ideology has carried over into production agriculture as well, and now the public is sending up a cry of protest. The environment must be preserved for future generations, and the public believes that current farming practices are not meeting this need.

This presents agricultural educators with a dual role in protecting our environment. Our first challenge is to teach farmers and farm operators about environmentally sound farming methods. This could range from using simple modification in traditional production practices to utilizing sustainable agriculture techniques. Producers must understand how they are harming the environment, if they are to prevent future damage to it. Our second challenge lies in educating the public about the conservation techniques that are currently being used by farmers to protect the environment. This will provide more public support for the farming industry, and in turn, make it easier for agriculturalists to employ environmentally sound practices.

Environmental problems attributed to agriculture include surface and groundwater pollution by agricultural chemicals, soil erosion, and antibiotic and pesticide residues in foods, among others. Most of these problems can be significantly reduced by alternative agricultural practices. For example, the relatively simple technique of rotating crops on a particular field can reduce the amount of nitrogen that must be applied to that field. This, in turn, reduces the amount of nitrogen that will move into groundwater and streams, and it also decreases water pollution. By teaching agriculturists the benefits of techniques like crop

rotation, integrated pest management, soil conservation, and improved animal production systems, we can begin to reduce the farmer's dependence on chemicals and also reduce the damage done to our environment.

Agricultural educators must also teach the public about environmentally sound practices that are currently being used, because agricultural illiteracy is the industry's greatest enemy. A small, yet vocal segment of the population is using incomplete and unsubstantiated points of information to sway the general public against farming and farming practices. As agricultural educators, it is our responsibility to fill in the missing information and further explain the current agricultural practices in use. Agriculturalists are often portrayed as environmental enemies, when in truth, the agriculturalist must preserve the environment in order to preserve their way of life. It is often the consumer market demand which pressures agriculturalists to produce products that require the use of environmentally unfriendly practices. For example, the consumer demand for unblemished fruit has led to increased applications of pesticides and fungicides in fruit production. By informing the public about sound environmental practices in use and giving them less idealistic expectations for agricultural products, we can enhance the relationship between the agriculturalist and the environment.

Agricultural educators must play a dual role in protecting the environment if it is to be preserved for future generations. First, we must teach future agriculturalists that environmentally sound farming practices actually do work. Secondly, we must teach the public to have realistic expectations about both agricultural practices and products. Perhaps by working together the agriculturalist, agricultural educator, and public can start an agricultural revolution centered around preserving the environment for future generations. ■

* Heather Peters is an undergraduate student in agricultural education at Penn State. Her essay received top honors in the Alpha Tau Alpha National Essay Contest held this past November.