

Leadership Education for Agricultural Students

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Agriculture has had a rich history for developing leaders. Many Agriculture College graduates from across the country are now holding responsible leadership positions and are credits to their former institutions of higher learning. What part did the colleges of agriculture play in their leadership success? The answer to that question is not too clear.

The impact of rural youth programs, such as the Future Farmers of America and 4-H, has been significant. These programs emphasize the traditional leadership skills in parliamentary procedure, public speaking, and group interaction. In the main, these youth experiences constitute the total formal leadership education that our college of agriculture graduates obtain. On many agricultural college campuses, we have relied too heavily on those earlier experiences and assumed that if a student endures through four years of college and is exposed to a few campus organizations, he automatically becomes an agricultural leader (Barrett, 1981).

Research, common sense, and experience tell us that many agriculture college graduates are not ready to lead. Can we as college educators, who invest so much time and so many resources in technical and theoretical skills, afford to leave out leadership? The answer is an obvious no! Several colleges of agriculture across the country are seeking answers and providing solutions to this problem. Institutions such as the University of Nebraska are offering courses in communications and inter-personal skills specifically for agriculture majors. Such courses are a vital link in developing leadership skills, but in themselves are not adequate to meet the needs of leadership education. Specialized courses in leadership development are one answer to filling this need. Now, let us examine briefly what research has to say about leadership education.

Research and Leadership Education

There have been numerous studies of leadership education, but few on agricultural leadership. Although much of the research has been on the industrial sector, this research has tremendous implications for the leadership education of agricultural college students.

Researchers such as Chris Argyris (1976) have shown that leadership education can bring positive results. He found that it was possible to go beyond the traditional goals of education, namely, those of discovery of problems and concepts to teach people to invent and produce solutions within the learning en-

vironment under actual and simulated, stressful leadership situations.

Most of the research has been done with older subjects. In a study by Barrett (1978), using adult school leaders, positive results of leadership education were achieved as a result of a one-week workshop in which active learning methods, such as role-playing, were involved. Research shows that leadership education can yield positive results if conducted in the proper manner.

Essential Ingredients of a Leadership Program

There are three essentials to an effective leadership program. First, the learning atmosphere must allow a high degree of trust and cooperation between the learners and the teacher. Research by Victor Vroom (1973) indicates that persons who are to become leaders must be brought to the point of realization that their present style of leadership behavior is less than effective and that they need to change. This kind of change can occur only in an atmosphere of trust. Since we are really trying to change leadership beliefs, attitudes and behaviors, you can see why a special learning atmosphere is important. A phrase Argyris (1976) uses is that "persons must be 'freed' from the theory that to be a leader, one must have control over others." This freeing process cannot be learned by talking about it!

The second essential is classroom management. The traditional classroom scene of high teacher dominance (teacher talk — students listen) is the easy way to conduct a class; but maximum learning may not occur. In an earlier work Chris Argyris (1962) reported that leadership education must take place in small groups so that intergroup relationships develop; and secondly, the participant must first develop a deep understanding and acceptance of himself. Robert Tannebaum (1961) echoed the same sentiment: "Programs designed to impart human relations information may have little or no effect in inducing desirable changes in behavior." Their research and other studies emphasize the importance of deviating from the "typical" college classroom scene, where students take notes and sit in rows of chairs. A high degree of interaction between class members and teacher is important.

The third essential is the instructor. A successful leadership course must be taught by a person who has a practical background on how leaders function in groups, as well as being well-rounded in leadership theory, group dynamics, advanced teaching methods, and knowledge of the agricultural setting. Now let's look more closely at a leadership classroom.

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adequate reference to the most recent literature on the respective subjects. One wonders if the text were not prepared many years ago and references updated primarily with only the author's own publications just before press-time. Generally, however, the text has been "modernized" to a greater extent than the references.

Inadequacies in editing and proof-reading will be evident to the thorough student. For example, the factor for conversion of liters to gallons in one of the first tables is the reciprocal of the correct value. It is especially surprising that there is careless use of irrigation rate and quantity terms. Milliequivalents per liter is defined in Chapter 11 but used well ahead of that. Use of symbols, with or without subscripts, is not always clear, especially in Chapter 6. All graph legends were not made with the same size or kind of type. Some legends are faintly printed and many would benefit from larger type. Better editing should have eliminated these deficiencies and improved the presentation significantly. While the price probably is not excessive for a text of this size, it would seem that better figures and perhaps a higher quality paper might be expected.

The book should be a useful text for courses in management of arid and semi-arid soils under irrigation.

It should not be considered as a text for a course in irrigation, and it does not claim to be such. It will be found especially good as a text or as a reference in management of salt-affected soils.

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Geoffrey S. Shepherd and Gene A. Futrell. **Marketing Farm Products: Economic Analysis.** Ames: The Iowa State University Press, Seventh Edition, 1982. 428 pp. Clothbound \$25.95.

In this seventh edition of their well-known text on marketing farm products, Shepherd and Futrell continue to keep their material comprehensive, informative, and up-to-date. They opt for a compromise among the many approaches to teaching marketing by dividing their book into a brief analytical introduction and two longer sections which they label "crosswise" and "lengthwise" approaches.

The lengthwise section devotes one chapter to the marketing institutions, trends, and problems in each major commodity, cattle, hogs, milk, manufactured dairy products, poultry and eggs, grain, cotton, and fruits and vegetables. The crosswise section is much less easily categorized. It includes chapters on elementary supply; demand and price theory; seasonal, cyclical and geographic impacts on price; impacts on grades; government programs; futures markets; and issues related to marketing costs.

Taken in conjunction with more specialized courses in economic theory, agricultural policy, finance, and farm management, the materials should provide a student with a solid basis for understanding the marketing of farm products.

However, sheer volume alone may give a student a false sense of competence in farm product marketing. The book takes the traditional perspective that the most critical marketing elements for the farmer occur either on the farm or between the farm gate and the primary receiver. If that were ever true it is certainly no longer true today when successful marketing depends on an understanding of national and international issues farther along the marketing system. For the many students of farm product marketing who will work in agribusinesses of various kinds, the usual farmer preoccupations with grades and standards, primary markets, and government price supports may be less relevant than a greater understanding of consumers at home and abroad, wholesalers, retailers, freight forwarders and import agents, government's general economic policy (whether expansionary or not), the dollar exchange rate, and other items not usually of concern to farmers. Indeed, I would contend that farmers too will have a more realistic appraisal of their marketing options when they have a better understanding of the less proximate aspects of the market. These the book treats rather briefly.

The authors also tend to become hesitant in evaluating the performance of various elements in the marketing system, both new and old. They have a fondness for the perfect competition model as a benchmark against which to measure actual market behavior, and see the monopoly model as the epitome of marketing ills. Since most marketing firms lie between these poles (and have done so for decades), the real issue is how to measure and improve efficiency and equity where marketing firms now are.

Unfortunately, researchers have either been captivated by the same non-existent poles or disagree violently on how market performance might be measured in between. Thus, the authors do not have many reliable sources of information from which to draw. Unfortunately, one of their few definitive quotes, that "the monopoly overcharge on processed foods is about 10 percent," has been shown by O'Rourke and Greig to be a very unreliable statistic. Their call for "a vigorously enforced antitrust policy aimed at striking at discriminatory practices wherever they appear" ignores the persistent failures of existing anti-trust statutes.

The decline in the number of farmers, the growth in farmer cooperatives, waiver of antitrust provisions for export DISCs and for trading companies on the Japanese model, are all moving agricultural marketing farther from the model of perfect competition without much apparent regret by farmers. In turn, the Reagan administration's latest curtailments of free

collection at Nebraska and other institutions is continuing, and it is too early to draw definite conclusions. However, feed-back from students is extremely positive. They do feel that leadership education has made major improvements in their self-perception and ability to lead groups. Many students have already found key leadership positions in Agricultural campus organizations.

College programs in agriculture are faced with a challenge to help develop capable leaders. "The journey of self-discovery into leadership education can be frightening and harrowing. Yet, the person who refuses to take this journey confines their life to a ritual of self-deception; they become a 'hollow person,' one of the many non-persons who, trance-like, notice life but never live it (Halpin, 1966)."

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Using Chronologies in the Training of Students

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Abstract

Excellent teachers are on the alert to methods that can be used advantageously in their teaching. The use of chronologies in the academic training of a student can be effective, especially in science courses. Fourteen ways in which the instructor can make chronological material "come alive" for students are suggested. A sample of a chronology for a course in plant breeding is also presented also.

The use of chronologies in the academic training of a student can be a valuable addition to a science course such as plant breeding, animal breeding, genetics, plant pathology. Justice Oliver Wendell Holmes said, "When I want to understand what is happening today or try to decide what will happen tomorrow, I look back. A page of history is worth a volume of logic."

The author has experienced that period on our campuses in which many students had little or no interest in learning about what had been accomplished before their day. It was not uncommon for a student with this lack of interest to rationalize by saying, "These things have no relevance to me. I am interested only in what is happening now." This viewpoint has been shared sometimes by instructors who make assignments for seminars or papers with the require-

ment that no literature citations over 10 years old will be acceptable.

There are indications today that the aforesaid trend has been reversed. The trend now is toward students learning and appreciating important contributions of others to the science which they are studying. With the proper encouragement from the instructor, students can recognize the relevance of these contributors to their life today.

This paper will cite some things that the instructor can do to make chronological materials "come alive." Specific examples from the author's experience in his plant-breeding course will be presented.

Making the Material "Come Alive"

Wortman and Loftus (8) classify memory into three distinct types: sensory, short-term, and long-term. They state that sensory memory is momentary with a loss of information in about 1 second. It is a clearing house for incoming information. Short-term memory is that type in which information is stored for about 15 to 20 seconds and then lost. Long-term memory stores information that might be needed again. With this type, experiences are not lost when a person stops thinking about them.

Long-term memory is facilitated by impression (using one or more of five senses); by association; and