

to revise our offerings within the college to provide true liberal education for the nonagricultural students. Let us briefly examine each of these.

We have noted that agriculture should be considered in the humanities as well as in the sciences. Yet, many colleges do little to prepare the future leaders of agriculture in the basic humanities outside of worrying about their ability to communicate. While communications ability is important, the content of the message to be communicated is also vital. We desperately need agricultural leaders who can communicate not only the scientific and systems aspects of agriculture but also the human difficulties of some of the basic choices. We need to know the increased number of calories of food available for human consumption if the sacred cow of India is considered no longer sacred. We also need to know the social, political, and cultural implications of such a decision for the Indian population. This example illustrates the complexity of many decisions. Many such decisions and choices face us every day. Consider the decisions on increasing U.S. food aid and whether to tie food aid to political decisions in the developing countries. Or, should the poor pay more for food stamps and should food stamps for children be tied to the willingness of parents to seek employment or limit family size?

Just as agricultural leaders need a better understanding of the humanities, the general public needs a much better understanding of agriculture and food supply. We need to reevaluate our course offerings for the rest of the university to determine whether we can package programs that would be truly liberal education for the student in the liberal arts or in professional programs outside of agriculture. Could we design, for example, a year-long sequence that conveyed the basic concepts of agriculture as an interconnected system with scientific roots in the physical and biological as well as social sciences and interactions with the humanities? Why can't we convince the rest of the university faculty that the

truest form of liberal education is studying the food system in its complexity and interrelatedness? It is a unique opportunity for students to understand the process by which food, the most essential ingredient for continued life, is obtained, while at the same time receiving a liberal education reflecting the integration and synthesis of the natural sciences, the social sciences, and the humanities.

Properly developed components from such a program could become important elements of an extension or continuing education program. There is great need for such an education because of the increasing number of people with no first-hand experience in farming and agriculture. It is to be hoped that leadership and an educated public would quickly recognize the fraudulent nature of many of the quack cures for the world food problem that currently obtain support.

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THE CHANGING MISSION

The Two-Year Agricultural Junior College In Response to the World Food Situation

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Abstract

A broader scope is defined as current courses are modified while retaining academic integrity. Examples are given to indicate one institution's response to the world food crisis.

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Traditionally junior and community colleges have offered educational programs to meet the needs of the immediate community. At Northeastern Junior College, the world food crisis broadened the scope of attention already given to effective production methods and heightened the emphasis on economic and political implications.

Within the agriculture division during the last 10 years there have been significant curricular changes that

contribute to awareness of world food problems and interest in helping solve them:

1. Working with the division of occupational programs to plan agriculture related programs leading to Associate in Applied Science degrees which alternate classroom study with salaried on-the-job training. These programs include: agri-business (a widely adopted pilot junior college program), farm chemicals, animal nutrition, grain and feed, farm machinery mechanics, and turf management. Instructors and representatives from the farm chemicals industry continually emphasize world fertilizer needs to ensure adequate production. The farm machinery mechanics program responds to the emphasis on large-scale mechanization of agriculture which is one solution to meeting the need for increased food production.

2. Providing programs in occupational agriculture for those who wish to go directly into farming rather than transfer to a four-year college. Great flexibility makes it possible to take courses to meet anticipated need, including courses from any occupational program. This also adds to student exchange of ideas.

3. Expansion of course offerings in agricultural economics and marketing and encouraging students to include accounting and computer courses.

The effort to put students in touch with "the real world" has expanded. Use of community resources with international trade affiliations offer an effective supplement to classroom teaching. Knowledgeable visitors, including a statesman from Ethiopia and several Peace Corps representatives, have spoken to students on subjects ranging from land reform movements in foreign countries to food distribution and consumption habits in diverse parts of the world. Visual aids have been added to show the correlation between agricultural production and foreign markets.

Travel Study Is Added

As class techniques were changed to include greater awareness of U.S. production in relation to the world food supply, agriculture division members proposed a travel studies class dedicated to increasing the students' first-hand knowledge of world food problems. Argentina was selected for the first travel class in December 1973, because of its reputation in cattle production and diversified farming operations. Two weeks of night orientation classes preceded two weeks of travel study. The Agrarian Institute of the University of Argentina in Buenos Aires helped arrange visits to production areas. One week was spent in debriefing where student and instructor evaluations contributed to plans for other study tours to follow.

A second tour went to Australia in December 1974. Planning and effectiveness were enhanced by a staff member who had been a Fulbright research student in Adelaide. In Australia, study concentrated on produc-

tion most competitive to our own: beef, mutton, and wheat. The impact of information and experience gained by students has been shared in college and community by student reports in television, radio, and newspapers.



Field Trips in Marketing

In another program modification, the instructor in agricultural marketing substituted field trips to agricultural marketing and processing plants for laboratory periods. By applying textbook knowledge to actual business operations, he hoped to make subject-matter more relevant to both world trade and domestic consumption.

In Northeast Colorado, students witnessed processing and packaging of beef and beef by-products for shipment to Europe and Japan, dry beans for Mexico and Algeria, wheat for the Middle and Far East, and other commodities for local retail sales. This, with trips to markets handling foodstuff imports, provided an overall view of world production and distribution. Enrollment in the course increased and it received strong community endorsement.

In a student rating of the course, with a range of 1 to 4 on sixteen different evaluations, the range in student evaluation was from 3.0 to 3.9. On six items, instruction was rated higher than average on all instruction, average on six, and below average on four. Another evaluation rated the course and each laboratory visitation. The overall rating of the course was above average for all agriculture courses. The laboratory visitations received an excellent rating from all 56 enrolled students. Results have prompted a similar approach for the course in agricultural finance, which will be introduced in the fall quarter, 1975.

In reviewing procedures for keeping pace with the world food problem, three conclusions were reached:

1. Students accept and benefit from expanding concepts of the social, economic, and political influences that affect world food supply.
2. Current courses can be modified successfully if care is taken to retain academic integrity with appropriate course content and evaluation procedures on what the students learn.
3. Student reactions to world affairs are good indicators that valid reasons exist for teaching basic scientific concepts with relevant correlation to contemporary world affairs.

The Northeastern Junior College approach has stimulated student interest and sense of achievement, with increased enrollment as a result. The world food crisis has brought a spontaneous, idealistic response from youth.