

thing to do with vocational education is to forget it. (This position, by the way, is in marked contrast to that of agricultural college graduates who overwhelmingly favor more practical training in the curriculum.)

The general attitude of administrators in the Land-Grant colleges on this matter is reflected in the fact that few of the colleges make farm experience a prerequisite for graduation and hardly any offer on-campus, practice courses for credit. The assumption made is that higher education in agriculture is and should be committed to providing an education that stresses basic theory. Vocational education is the function of two-year schools, short course programs, and on-the-job training programs—not degree programs. Besides, vocational education is of limited value in view of the fact that technical agricultural skills soon become obsolescent.

There are other spokesmen for agricultural education—they are to be found principally among professors in the Land-Grant colleges and among both administrators and professors in non-Land-Grant colleges—who deplore the separation of practice and theory. They take the progressivist position that the student is of a piece and that the learning of theory is facilitated by personal and current experience with practical problems. The rationale of proponents of farm experience is that intrinsic motivation is a powerful stimulus to genuine learning and that meanings develop out of active involvement rather than from an exposure to facts or principles unrelated to personal experience or felt needs. And it is primarily for this reason (though it is not the only reason) that animal judging courses, student projects, required summer work, and the like, are recommended.

Conclusions

Since World War II, agricultural educators have been concerned with a number of pressing problems, including the proportionate decrease in enrollment, the failure to attract enough students of high academic ability, the need to educate top-level leadership for the agricultural industry, and the growing importance of agribusiness and graduate school in the absorption of agricultural college graduates. One of the significant responses to these problems was the widespread establishment of options in agri-

cultural business, agricultural science, and agricultural production.

In the course of the post-war reevaluation of the purpose and character of agricultural education, a powerful movement developed in favor of providing a curriculum that would emphasize basic education and, correspondingly, would radically deemphasize technical education, particularly the so-called vocational type. The rationale of this movement bears close resemblance to the essentialist tradition in education. As a result, the question has been asked as to whether an agricultural college can justify its existence if its curriculum is dominated by non-professional, basic education courses. This question remains to be answered.

Although the movement toward "basics" has found more ready acceptance in the Land-Grant colleges, many of the non-Land-Grant agricultural schools and departments have been caught up in it. In part, this may be attributable to the academic respectability sought for in the competition with Land-Grant colleges. In any case, administrators in the non-Land-Grant schools can find theoretical support for their "practical" approach to agricultural education in the postulates of progressivism. And it may be that with this support, they will feel free to conduct imaginative experiments in education that will fortify the professional character of the curriculum of agricultural students.

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Reaching Educational Objectives Through Cooperation

Was there ever a time when educational programs in agriculture were limited in scope and when each institution knew what its "arena" was? In the world of expanding enrollments, more accurate appraisals of employment opportunities and personnel needs, more realistic appraisals of the manpower needs of production

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agriculture, and general stress on post - high school education and training, concepts of institutional coordination and cooperation become increasingly important.

Minnesota's programs in agricultural education are many and varied. Its 289 high school vocational agricultural departments with 344 instructors enroll 13,600 high school students and serve 13,800 adult farmers. Of the State's 20 operating Area Vocational - Technical Schools, eleven provide service to adult farmers in the farm management area and twelve offer either continuous supervisory service to the adult farm management instructional programs of the high schools of their respective areas or specific course programs in agriculturally related areas under titles such as "Farm Equipment Mechanics," "Agricultural Chemical Technician," or "Plant or Animal Science Technician." Three of the State's thirteen public Junior Colleges offer collegiate instruction in agriculture. The University of Minnesota is in process of establishing a two-year collegiate Technical Institute in the facilities formerly occupied by an agricultural high school, and operates one comprehensive agricultural high school in another location. And the College of Agriculture, Forestry, and Home Economics of the University provides professional programming for some 1500 undergraduate students in Agriculture and Forestry, with an additional 600 students engaged in graduate study in agriculturally related fields. Supplementing the offerings listed above is an aggressive Agricultural Extension program, operating through its specialist staff and county offices. The sum of the educational outputs of these separate institutions is impressive. The potential service provided by an integrated program, however informally joined, is even greater. Hence in early 1965 a small group of planners representing each of the administrative areas contributing to agricultural education in Minnesota came together to review their relationship. Out of this initial conference came the Seminar on Agricultural Education in Minnesota, held from June 6-8, 1965 at the University of Minnesota Southern School of Agriculture, Waseca, Minnesota. This two-day conference, attended by 70 college and school administrators, counselors, teachers, teacher-trainers, extension specialists and county agents, farmers, and business and industry representatives sought to identify and define those questions to which answers must be sought if Minnesota's educational programs in agriculture are to be fully effective.

The questions as outlined below are not new and are not peculiar to Minnesota. They do, however, serve to lend focus to inquiry and point to discussion. They are not all-encompassing. But interest in a continuing forum has been heightened, and planning for a 1966 seminar is under way. Research proposals are being developed, and an active program of information-giving with respect to the educational program opportunities available is being encouraged.

Here are the issues felt to be of immediate concern to the broad spectrum of agencies repre-

sented at the 1965 seminar:

1. How can Minnesota best organize itself for educational planning in agriculture?
 - a. Role of Liaison Committee?
 - b. How to achieve coordination in post high school programs?
 - c. Feasibility of master plan — how it might be achieved?
 - d. Program priorities?
 - e. Financing programs?
 - f. Developing and use of suitable facilities?
 - g. Evaluation of present structure?
2. How can agricultural programs be kept up-to-date with respect to:
 - a. Disadvantaged adults?
 - b. Need for occupational improvement or retraining?
 - c. Technological and industrial change?
 - d. Opportunities for self-employment?
 - e. Developments outside the state, regional or national?
 - f. Research needs—whose responsibility?
3. How will we provide teachers to meet new and expanding program needs?
 - a. Teacher recruitment for initial preparation?
 - b. Development of appropriate programs?
 - c. Utilization of industrial resources and talents?
 - d. In-service education needs?
 - e. Specialized vs general preparation?
 - f. Evaluation of present and needed programs?
4. What coordination is needed for optimal programming and related services for agricultural education?
 - a. Role of short courses?
 - b. Coordination of on-the-farm instruction between ag. ed. and ag. extension?
 - c. Role of comprehensive junior college and area vocational technical schools?
 - d. Greater utilization of industry and resources—appropriate role?
5. How can we best interpret agriculture and agribusiness needs in a way to make them attractive to students?
 - a. Improved guidance services?
 - b. Role of the ag. teacher in guidance?
 - c. Systematized pupil accounting and placement?
 - d. Sensitivity to employment possibilities?
6. How can we interpret agriculture to supporting groups and agencies?
 - a. Professionals in schools and colleges (counselors, administrators, etc)?
 - b. Supporting programs — recreation conservation, forestry, etc.?

The task now is to seek the answers. In the welter of programming stemming from a variety of funding sources, resistance to changes in traditional relationships, undue sensitivity to invasions of traditional prerogatives, or too spirited competition for limited resources or personnel could lead to inter-institutional stresses beyond the necessary. A willingness to consult, to explore common problems, and to seek solutions through cooperative endeavor will hopefully add to effectiveness and efficiency of service provided to participants in the broad and complex program of agricultural education in Minnesota.