TEACHER EDUCATION NEEDS NEW IDEAS

E. M. Juergenson, University of California

The program in agricultural education has, since its inception, developed and spread over the nation in an astonishing and gratifying fashion. Now that its growth, as far as numbers of students involved, has leveled off we are shocked, occasionally even frustrated, and ask what's wrong. Perhaps nothing. Agriculture has become more efficient, required fewer persons, and in most industries this
would be lauded rather than lamented. In America we have a tendency to equate size and progress, but is the bigger the better always true? Size is only one factor in the development of agricultural education; and while it cannot be completely ignored, other happenings may be just as significant.

Growth and development, are, of course, linked with change; yet exactly what constitutes growth and development is often obscure. For this reason, we may be reluctant to try new ideas and seek refuge and security in those things which worked in the past. If a program does not increase in size we are apt to assume no growth is being made and often redouble efforts to make it larger rather than better.

The factor of efficiency, which among other things involves getting a better job done in a shorter time with fewer people or resources, is often overlooked. No matter how it is viewed, agriculture has certainly accomplished this, and should proclaim this proudly and widely rather than assume it is declining because fewer people are needed, at least in production agriculture. Without the release of people from the farm, modern technology in other fields would have been seriously hampered. One of the few advantages of age is the ability to view events and happenings in their proper relationship and perspective. What our experience shows us and helps us evaluate, is the relative importance of events in the past, so that present problems and future planning can be met intelligently.

The real problem that we in agricultural education should be alert to and willing to grapple with is our reaction to new ideas, new situations, and new needs. If we use our age and experience correctly, current problems and new situations may be more intelligently approached.

Not many years ago, the use of welders and power saws was questioned in agricultural mechanics classes. Today they are standard equipment. The reason often given for not accepting these strange new tools was that they were not found in home shops, therefore, students shouldn't be expected to learn to use them. Before long, however, some communities had welders in shops on home farms and none in the agriculture department. Today the same feelings and conditions may prevail in regard to metal lathes, special bending tools, or new power equipment. In agricultural science courses we traditionally tend to teach only production agriculture, i.e., making two blades of grass grow where only one grew before. Yet the problem of modern agriculture is much more involved and is concerned, in addition, with a host of "off farm" factors such as liability insurance, income tax, commodity payments, governmental regulations, and so on. Electric adding machines, microscopes, and artificial insemination equipment are now part of the agricultural science program. Granted, each new item must be carefully evaluated rather than blindly accepted, but the modern department of agriculture should be the leader in introducing and teaching the use of new tools, skills and abilities.

In similar fashion, we in teacher education should be alert to new needs, new conditions -- which in turn may demand new kinds of teachers.

For many years the teacher education program in agriculture has been recognized as an outstanding development in teacher education, not only by those directly concerned, but by educators as a whole. In many cases it was felt to be expensive, but the product justified the means.
Many changes have taken place and new programs have been developed, yet most teacher education programs are still designed to produce the typical all-round teacher of agriculture needed in a one-man department. This person must be equally proficient in agricultural science and agricultural mechanics, not to mention a host of subdivisions such as farm management, accounting, and responsibilities connected with co-curricular activities. In a surprising number of cases, much to the credit of teacher education programs, this kind of teacher did result.

However, in our present specialized agriculture, it is becoming increasingly difficult for every teacher to know enough in all fields to be the kind of leader a community needs. Furthermore, such a program puts little stress on the interests or, more important, the special aptitudes of individuals. Conditions change, and teacher education institutions should take the lead in meeting new situations. One development is the increasing number of multi-man departments which can absorb and put to most efficient use individuals trained in their special talents. Even in small schools, which normally are one-man departments, the possibility exists of increasing to two teachers of agriculture by each teacher teaching part time non-agricultural courses in the curriculum. This gives twice the manpower for most curricular and co-curricular vocational agriculture activities, and in addition allows a better opportunity for the individual strengths of each person to be utilized. Another changing condition is the increased interest in general agriculture or non-reimbursed agriculture being offered in many schools. Such a course may be the only agricultural course in a metropolitan school, but in a rural school would be offered in addition to the regular vocational agriculture curriculum and recommended for every boy or girl. In a modern urban society where most people are far removed from nature, agriculture can be the best general education that any student may receive. What kind of education should a teacher of agriculture have in order to teach and develop a curriculum in this area of general agriculture, or agricultural arts as it may be called, where there will be many students with a non-rural background (often as many girls as boys) and the intention to seek employment in the field is not a factor? Teacher education institutions must develop specific programs to help new teachers cope with this situation.

Teaching ornamental horticulture and related courses is of major concern in large cities, and even important as a part of the rural education program. Home beautification can be a part of each student's improvement program, or used as a project, for this division of agriculture is now as important as traditional enterprises. Teachers of agriculture are not adequately trained in this subject. While it is true that most teachers have a background in genetics, botany, plant pathology, and related sciences, most lack specific knowledge of ornamental horticulture, and so are unfamiliar with identification, propagation or landscape design.

The functions of junior colleges are, in many respects, unique and different from high schools. Included among their several functions are general education, vocational education, a community college function, an exploratory function, as well as providing the first two years of college. Many junior colleges have departments of agriculture, some of considerable scope. Thus far the teacher education program is the same for these teachers as for those teaching in a high school.

Current practice is to select a highly successful teacher of high school agriculture and draft him to teach in a junior college. This seems like a commendable and workable practice, yet the fact that the teacher is successful in a junior college may have little to do with the teacher education program in which he received his experience.
Conditions have changed enough so that the traditional pattern of preparing each teacher of agriculture to do every job needs to be reviewed and altered, in some respects, if agricultural education is to maintain a leading role in the community and in education.