

ISSUES IN TEACHER EDUCATION

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The problem of meeting the man power needs of an expanding program in vocational agriculture both at the high school and post-high school levels has greatly taxed the resources of teacher education departments. A more acute problem, however, is that of providing in the pre-service program the competencies necessary for success in the varied teaching situations in our respective states. The problem would be relatively simple if we could expand to a five year curriculum. In the long run this may be the best answer to the problem. At present, however, it appears that we must find other solutions.

One solution to the problem would be to, through reorganization of school districts, enlarge the attendance centers to justify specialists in the various areas of subject matter. Curricula then could be organized so that agricultural education majors could prepare themselves for employment in a special type of farming or related off-farm agricultural employment area. It will be some time, however, before large numbers can be employed in this manner.

The vocational agriculture departments in most states are in the main one-man departments. There is a common core of competencies needed by instructors in the one-man departments. The specialized competencies, however, may vary widely from community to community. At least five economic or type of farming areas exist in the state of Iowa. One area is largely cash grain farming; one is a specialized dairy area. In one the emphasis is largely swine production and beef cattle feeding, whereas in another section of the state, the problems are largely related to soil conservation and pasture farming.

There appears to be at least three approaches to the problem. One is to provide a curriculum with a well balanced core program with sufficient electives for the student to specialize in the area or areas of his interest. The second approach would be to provide a balanced program which would include some preparation in all areas of specialization, thus, resulting in very few electives. The third possibility would be to provide two or more curricula each designed to prepare individuals for employment in a specific type of farming or off-farm agricultural employment situation.

The Iowa program at present is one of the second type which provides somewhat a balance in preparation in all areas of subject matter thought to be necessary in teacher preparation. Approximately 21 quarter credit hours are required in each of the four agricultural subject matter fields, agronomic science, livestock and poultry science, agricultural economics and farm management, and in agricultural engineering. Approximately 15 quarter credits are required in each of the communications, biological science, physical science and social studies and humanities fields. Approximately 37 credits are required in professional subjects which include psychology, general education and

agricultural education. Approximately 9 credits in mathematics and statistics are required, thus, leaving only 10 credits as electives in a 200 credit curriculum. The addition of an extra quarter of work would add greatly to the development of an area of a specialization.

The content of courses in production agriculture in our colleges of agriculture has changed greatly during the past 10 years. Greater emphasis is being given to scientific principles and concepts and less emphasis upon application. It is imperative that we obtain from the various departments in our colleges of agriculture the course content that will best meet the needs of our prospective teachers. In most cases this needs to be done without the providing of specialized courses for majors in agricultural education. Considerable improvement can come about in our teacher education programs through the improvement of content and methodology in courses taught by service departments. In most cases improvement can best come about through change of course content rather than by the addition of new courses.

Each course included in agricultural education curricula must be carefully evaluated. In some cases another course in the same discipline or area may better meet the needs of our teachers. It is also likely that men preparing for other types of work may need the same type of preparation that our men need. By working with the curriculum committees of the various departments, it may be possible to greatly improve the content of the courses included in the curriculum.

Most teachers develop their specialization after their first employment. It probably is not logical for us to assume that we can turn out men in four years who are specialists. One answer to the problem is the providing of a greatly improved in-service training program for vocational agriculture instructors. Another answer is the providing of improved offerings of instructional aids and materials. The undergraduate preparation should develop a trainee to the place that he can make adjustments and be creative in planning instructional programs and in obtaining new subject matter needed in the community in which he is teaching. The personnel and resources allocated to the development of instructional aids and materials may in the future prove to be the most productive phase of teacher education.

There is no question that many teachers leave their vocational agriculture positions because they find themselves attempting to do an impossible job. Satisfaction in employment is associated with accomplishment, appreciation of the value of the program to others and rewards (financial and otherwise). Instructors who are not well prepared, or who are working under a load that will not permit them to become prepared, cannot possibly take satisfaction in their accomplishments. Continued employment under these conditions can only result in dissatisfaction and emotional instability. Teacher educators must assume responsibility for preparing trainees for varied responsibilities, and for providing in-service programs for instructors varying in ability and preparation. Teacher education programs must deal more directly with the personal and humanistic problems of the individual. This we have not done to any great degree heretofore.

Some college of agriculture personnel believe that the answer to our problem is to have prospective teachers enroll in specialized curricula and then elect those courses necessary to meet the requirements to qualify as teachers of vocational agriculture. In some cases this could be done in a four-year period. In many cases it would require 14 or more quarters of work. This does not seem to be the answer in states where we already have a serious shortage of teachers. Neither is it an answer when the specialized curricula in the department involved includes depth of specialization beyond that needed by teachers of vocational agriculture.

To summarize, it appears that there are many approaches to the development of a satisfactory teacher education program in agriculture for our respective states. The approach made should provide a common core of competencies needed by all teachers of vocational agriculture, and sufficient preparation in the various areas of specialization so that the individual could quite readily adapt himself to the needs of the community in which he becomes employed. Without question there is need for more depth in knowledge of soil science, agricultural chemicals, agricultural policy, farm management, agricultural credit, animal breeding, animal nutrition, farm machinery maintenance and operation and in farm power.

Our teachers need a better understanding of both the biological and physical sciences and must be more scholarly in mathematics.

As leaders and citizens in their respective communities, they are going to need to be more understanding of the problems of government, society and as individuals. More emphasis must be given to the humanities than has been provided in the past.

The tradition, ancient history and filler must be squeezed out of our offerings in professional courses. These courses must be up to date and include the innovations which have proven themselves or are proving themselves at the present time. The student teaching period probably will need to be lengthened and include opportunity for experience in agricultural occupations other than farming as well as in farming communities. Teacher educators, our charge is clearly defined. It is not an impossible task.