

4. Professionally trained vocational guidance personnel need to be provided the schools in sufficient numbers to permit frequent conferences with students concerning career plans. Only one-third of the students had been counseled on occupational plans by guidance counselors or teachers. Furthermore, the occupational choices of students who had received counsel were not significantly different from those who had not had such conferences. School personnel could be more effective in career counseling if they were better informed of the conditions in the world of work.

5. A greater student awareness of agricultural careers may be developed through emphasis on training for nonfarm agricultural occupations. Only a limited and insignificant number of the vocational agricultural students in this research chose careers in agriculture. Recent research in Louisiana has indicated that numerous rewarding careers in agriculture are available for qualified persons.

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FUNCTION APPROACH

by

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I have been asked to discuss some experiences we have had in the use of the function approach to the development of curriculum as it applies in vocational agriculture and particularly in the programs for agricultural business and industry.

As part of the background for my discussion, let me review very briefly some of the work that was done by our colleagues and associates back in the late 1950's and on up to more recent times. In 1957 Sutherland and Thompson¹ studied, The Training Required by Workers in Agricultural Business and Industry in California. They found a lack of uniformity from one business to another of the same kind, in terms of job descriptions or in terms of the kinds of things required of workers in approximately the same category. For example, in some shops farm machinery repairmen were expected to meet the customer. In other shops, they never met the customer.

Sutherland and Thompson as well as others have reported an almost universal absence of written job descriptions in agricultural business.

¹ Sutherland, S. S. and E. E. Thompson, The Training Required by Workers in Agricultural Business and Industry in California, Report of a Study: Sacramento: California State Department of Education, 1957.

Kennedy² studied the degree to which knowledge, skills, and abilities required for farming are also required for workers in agricultural business.

At about the same time we conducted a staff study in which we determined some of the training needs of persons employed in local, small town non-farm agricultural businesses in Michigan.³ In this study we attempted to find out what workers do in these businesses and to identify some of the areas in which training is needed. One of the unique characteristics of this study, was the fact that we tried to identify needed areas of training not typically characteristic of vocational agriculture areas in which training is needed. For example, we identified some needed areas in science, mathematics, communications, office practice, distribution and others as well as more familiar areas in agriculture.

Of course, at the same time many of our colleagues throughout the country were busy making similar studies and trying to adjust programs to meet changing conditions. The movement is still going on.

As I see it, the next step was one in which we attempted to find a basis for the development of curricula. This is the point at which we got involved with the Function Approach. As I go back and read the materials we produced at the time and recall some of the discussion and thinking and study that went into our efforts, it seems to me we were trying to apply some of the principles and practices we had always used in our programs. We had always said, "find out what the best farmers do and base the vocational agriculture program on their practices."

In the new situation, brought about by the rapidly changing status of farming, and by the public demands reflected in the 1963 Vocational Education Act, we attempted to find out what employees in non-farm agricultural businesses do, and to base our instructional program on their practices.

Some of my T & I friends were quite sure that something was lacking in the programs they were using and in the product they were offering to industry for employment. They felt that "there must be a better way."

All this caused me to begin to raise questions with some of our graduate students and others, essentially saying, "What things (functions) must be performed in an agricultural business or industry in order for it to succeed," or conversly "What are the things that will cause an industry or business to fail if they are not performed."

² Kennedy, William Henry, "A Clarification of Relationships Between Farming and Certain Other Agricultural Occupations with Implications for Guidance and Curricular Development." Unpublished Ed.D. Thesis, East Lansing, Michigan: Michigan State University, 1958.

³ Clark, Raymond M., Need for Training for Non-Farm Agricultural Business. East Lansing, Michigan: College of Education, Michigan State University, 1959.

As we worked with people,--business men, students, specialists in the college of agriculture and others, we identified a number of these "things" and we labeled them "functions." We recognized that not all the functions must be performed in any one business, but that all of them must be performed somewhere in the total industry if the industry is to survive.

When we did the feed study we identified nine functions as follows: (1) Processing, (2) Sales, (3) Service, (4) Office Practices, (5) Public Relations, (6) Purchasing, (7) Transportation, (8) Research and (9) Maintenance.

As we presented these to industry people in the feed business, we had practically 100 per cent agreement that these truly did represent essential functions of the industry.

Along with our list of functions, we developed a list of competencies, or activities, that we felt, are essential for the performance of a function. These are performed by employees at many different levels and on many different jobs in the business. Many examples can be cited such as the influence of the receptionist on sales; the influence of the salesman on public relations of the firm; or the influence of the man who delivers feeds or fertilizers or other supplies on the repeat business of the firm.

In some of our studies the competencies or activities under one or more functions have been rated by representatives of the industry involved --the feed industry--the agricultural chemical industry or the farm machinery industry. Using these lists and considering the relative importance of each competency to the business, we feel we can develop instructional programs that will prepare students for satisfactory performance in the business.

Let me hasten to add, however, that our list of competencies, the same as lists prepared by many other vocational agriculture workers includes items commonly taught in a wide variety of other vocational or academic areas. Common examples are competencies in distribution, commonly taught in a wide variety of other vocational or academic areas. Common examples are competencies in distribution, commonly taught in distributive education courses; communications, commonly offered in English and/or speech courses; mathematics and science offered in math., chemistry, physics or biology courses, and so forth. Thus we will need to involve nearly all the secondary or community college school system if we really develop an instructional program to fit our students for employment in agricultural businesses.

I would like to come back to the functions approach in relation to the development of the instructional program I have tried to describe here. If we can manage to show our students the relationship of their activities to the performance of various functions of the business, we should be able to overcome much of the criticism we get from employers that our product is lacking in such factors as human relationships, courtesy, responsibility, desirable attitudes and the like.

In the publication, Function Approach to Identifying Curricular Content Appropriate to Vocational-Technical Education Programs, we have drawn

together and summarized the studies conducted at Michigan State, dealing with this method of identifying a base for development of curricular materials and instructional programs. The publication summarizes the work done by Kennedy, Albracht, Gardner, Gleason, Berkey, Parsons, Christensen, and Clark, with Byram, Meaders, Lindstrom and Clark serving as advisors on some of the doctoral dissertations that are included.

The approach pushes us into a broad consideration of training needed to prepare students for employment in agricultural business. I see this more clearly as we begin to develop specific instructional materials that suggest teacher techniques and student learning activities.

We find that we must justify--to the teacher and to students--the importance of the activity and its contribution to the performance of one or more of the functions of the business.

This leads one to some guesses as to "where we need to go from here" in our program. Let me close with a few guesses.

As we use the function approach to identify functions and competencies and activities needed by our students for employment in agricultural businesses, we will be able to organize these into logical courses and instructional units. However, regardless of the way we may organize these materials, we will still have students in our classes with somewhat different occupational objectives. We could have students in a class in salesmanship whose interests lie in selling machinery, or grain, or nursery stock or a host of other items.

We will agree that the principles of salesmanship are the same, but if we are truly vocational in our programs, we will need to prepare instructional materials which will help teachers individualize the program so that students can apply the principles in their respective fields. At the same time we will need to prepare teachers to handle this kind of a teaching situation. This opens a whole new area for discussion, but it is one we must recognize and work on now.

As I see present trends, we are entering a period in the evolution of our program in which we will place much more emphasis on the development of teaching units, teaching guides and the like. We will build on the many curriculum guides that have been produced to take a next step into the instructional materials field. As we do this we need to make sure we are on a sound base supported by reliable research and philosophically defensible in terms of sound vocational education.