

ELEMENTARY LEVEL CAREER EDUCATION
AND AGRICULTURE

Clifford L. Nelson
Associate Professor

Department of Agricultural
and Extension Education
University of Maryland

Jeffrey A. Owings
Graduate Assistant

Vocational Education in Agriculture has a responsibility to ensure that agricultural and natural resource occupations are equitably represented in the Career Education Movement at all levels. Perhaps most important is to see that suitable materials and activities are provided for elementary school teachers, and that courses that touch on agriculture and natural resources are offered in the junior high schools.

Agriculture teachers, supervisors and teacher educators already have more to do than can be accomplished. However, the future of education in agriculture is dependent upon a steady supply of young people interested in agriculture and natural resource occupations. These people will be making decisions at earlier ages than ever before about which occupations they are interested in studying. If they make these decisions from ignorance about the taxonomies we represent, there is no doubt that our programs are going to suffer in the future.

Many agricultural educators are not yet ready to make a commitment to elementary education. However, a review of some of the recent literature of career education might be of interest as future emphasis on elementary education in agriculture is considered.

Career Education, Work and Vocational Choice

To look at Career Education one must look at work and what it means to the individual. Hoyt¹ would like to see work defined as "one's efforts aimed at the production of goods and/or services that will be beneficial to one's fellow human beings and/or to oneself." Quey² contrasts this definition of work to random activity which he says is "without purpose and maybe spasmodic or indiscriminate response to any chance stimulus or event."

In writing on work, Hoyt³ states:

"to consider the kind of work a student may elect to do and the personal meaning that the concept of work conveys to him will go a long way toward helping him to discover who he is, to determine the kinds of activities that will bring the greatest meaning to his life, and to find concrete ways in which he can demonstrate, through the work that he does, his worth as a unique human being."

The ability of the elementary school child to productively study work has been questioned. There is also a question about whether or not value formation has taken place at elementary school age. The following studies shed some light on the matter:

Wellington and Olechowski⁴ in a study, whose main purpose was to determine whether or not primary grade school children could realistically gain awareness important to vocational attitude and value formation, found that children did discover that jobs have advantages and that one's interests (likes) have something to do with the enjoyment of what he does.

A study based on data from boys and girls in grade four by Tyler⁵ found results that strongly suggest that patterned interests develop through the acquisition of dislikes by individuals whose initial attitude had been favorable toward everything, not through the emergence of both likes and dislikes on a neutral ground. Broad attitudes, such as those concerning one's sex and about work and activity seem to determine this patterning.

Hales and Fenner⁶ in a study of work value orientation of fifth, eighth, and eleventh grade students found that students favored work that is steady and dependable, pays well, permits them to utilize their skills and interests, and benefits other people. According to the authors, "this points to a fixture of extrinsic valuing (security and money) and intrinsic valuing (self-realization and altruism)." It was concluded that the development of values related to work is usually underway for most children by the fifth grade.

Using the normative revision of the Short Form Vocational Values Inventory (SFVVI), Cooker⁷ found that fourth and fifth grade children scored significantly higher than sixth grade children in values that reflect altruism. Other than the differences observed with altruism, there does not appear to be a great deal of difference in the way fourth, fifth, and sixth grade children select vocational order.

Hales and Fenner⁸ found that although sixth grade pupils differ in the work values which they hold, the work values of males as compared to females and the different social classes when compared to each other are more alike than they are dissimilar.

In a longitudinal study of the career development of boys and girls, Gribbons,⁹ using a multidimensional interview administered to pupils while they were in the eighth grade and again when they were in the tenth grade, found that there was an increased awareness of interests and values. Gribbons also found that many eighth grade

students were more advanced and ready to make vocational decisions than were some tenth grade students. It was concluded that for some students it would seem to be necessary to delay curriculum choices as has been advocated by many vocational psychologists.

Thompson,¹⁰ in a study testing Super's hypothesis that ninth graders are ready to consider problems of pre-vocational choice, found that freshmen students were very definite in what they considered important in a vocation; and in their sophomore year, over three-fourths still rated the importance of these values as they had the previous year.

Gribbons and Lohnes,¹¹ in a longitudinal study that tested 111 students in the eighth, tenth, and again in the twelfth grade; found that values do play an important part in early vocational development. It was found that even the eighth grade value statements of the sample were relatively free of fantasy. It was concluded that there was enough maturity of self-concepts early in the eighth grade sufficient to justify close attention from increased awareness of the working world.

In using Troy's question, "What occupation do you plan to enter?", "Be as specific as possible," "If you have no occupational choice, then put 'undecided'"; Hollender¹² interviewed 5200 students in grades six through twelve. The percentage of male students who reported a definite vocational choice was greater in the sixth grade and in grades ten through twelve, than in junior high school (grades seven through nine) for the students in the two lowest aptitude quartiles. Increasing intellectual ability, assessed by scholastic aptitude measures, was associated with increasing vocational decisiveness for both males and females.

Flores and Olsen¹³ in a study whose purpose was to investigate the level of occupational aspiration (LOA) in eighth graders found that eighth grade boys did not differ in their level of LOA from twelfth grade boys. The results of this study seem to indicate that LAO is probably formed in eighth grade boys and is possibly one of the first stable and realistic occupational considerations formed in young people.

It can be concluded from the above studies that much does take place in younger children in the area of value formation and selection of possible vocations. It can also be concluded that it is important for alternative vocational opportunities in the areas of agriculture and natural resources be made available to students at less than high school level.

Some Current Contributions from Agricultural Education

Agricultural Educators have many ways that they might work with other educators to ensure agriculture is included in the career education offerings of the school. Early leadership by teachers such as Dr. Robert Herr of Pennsylvania and his innovative sixth grade agricultural program could be replicated in other states. Herr teaches a course directly to sixth graders and he furnishes materials, outlines and training to the other elementary teachers.

Montgomery County Maryland is another site where innovative programs have been developed that fit the Career Education model. Most important has been the development of a new form of the FFA designed especially for seventh, eighth, and ninth grade students. The program, which started in 1970, is integrated with the high school vocational agriculture program so there is little or no duplication of subject matter or specific FFA activities.

Last year in Baltimore County Maryland over 1800 first graders toured the facilities of Hereford High School where teaching was carried out by high school agriculture students on subjects as diverse as Smokey the Bear to equipment used on the modern farm. This same school offers six mini-courses to junior high school students that touch each of the major areas in Agricultural Education. The program at Hereford High School has grown from a one teacher production agriculture program with 55 enrolled in 1958 to a current enrollment of over 400 junior high school and almost 400 high school students with four teachers. A total enrollment of over 900 is projected for 1974-75.

Preservice students at the University of Maryland are cooperating closely with Paint Branch Elementary School in Prince George's County in developing career education experiences in agriculture for elementary school students. This spring students assisted in assembling a tri-penta greenhouse, locating sites and giving advice in planting vegetables and flowers. During the fall of 1973, University Agricultural Education students assisted in digging evergreen trees that have been potted and sold to buy materials for the new greenhouse. Agriculture and horticulture teachers from nearby schools have also assisted with advice and counsel. An undergraduate student has developed a fourth grade level unit on plants and the environment for trial.

These are examples of programs that can be currently found in two states. As yet this type of emphasis cannot be expected in every school nor can every agriculture program expect to be involved in this type of activity. There is insufficient time and opportunity because of already limited resources of vocational agriculture instructors and teacher education staffs. However, teacher education

in agriculture must become more cognizant of the implications of career education and consider what the demands might be if agriculture were included as an integral part of elementary and junior high school curriculums around the country. Special summer sessions such as the one reported by Dr. James Durkee at Wyoming for elementary teachers in Agricultural Education Magazine would be just a beginning. Demand for teaching materials, professional staff and program leadership could support the most dramatic growth in history for agricultural education.

* * * * *

FOOTNOTES

¹Hoyt, Kenneth B., Evans, Rupert N., Mackin, Edward F., and Mangum, Garth L., Career Education: What It Is and How to Do It, Salt Lake City: Olympus Publishing Company, 1972.

²Quey, Richard L., "Toward a Definition of Work," Personnel and Guidance Journal, Nov. 1968, Vol. 47, No. 3, p.p. 223-227.

³Hoyt, op. cit.

⁴Wellington, John A., and Olechowski, R. "Attitudes Toward the World of Work in Elementary School," Vocational Guidance Quarterly, Vol. 14, No. 3, Spring 1966.

⁵Tyler, Leona E., "The Development of Vocational Interests," 1. The Organization of Likes and Dislikes in Ten-Year-Old Children," Journal of Genetic Psychology, 1955, Vol. 8, No. 2, p.p. 112-117.

⁶Hales, Loyde W. and Fenner, Bradford, "Work Values of Fifth, Eighth, and Eleventh Grade Students," Vocational Guidance Quarterly, March 1972, Vol. 20, No. 3, p.p. 199-203.

⁷Cooker, Philip G., "Vocational Values of Children in Grades Four, Five, and Six" Elementary School Guidance and Counseling, December 1973, Vol. 8, No. 2, p.p. 112-117.

⁸Hales, Loyde W., and Fenner, Bradford J., "Sex and Social Class Differences in Work Values," Elementary School Guidance Journal, October 1973, Vol. 8, No. 1, p.p. 26-32.

⁹Gribbons, Warren D., "Changes in Readiness for Vocational Planning from the Eighth to the Tenth Grade," Personnel and Guidance Journal, May 1964, Vol. 42, No. 9, p.p. 908-913.

¹⁰Thompson, O. E., "Occupational Values of High School Students," Personnel and Guidance Journal, April 1966, Vol. 44, No. 8, p.p. 850-853.

¹¹Gribbons, Warren D., and Lohnes, Paul., "Shifts in Adolescents Vocational Values," Personnel and Guidance Journal, Nov. 1965, Vol. 44, No. 3, p.p. 248-252.

¹²Hollender, John W., "Development of Vocational Decisions During Adolescence," Journal of Counseling Psychology, 1971, Vol. 18, No. 3, p.p. 244-248

¹³Flores, Thomas R., and Olsen, Leroy C., "Stability and Realism of Occupational Aspiration in Eighth and Twelfth Grade Males," Vocational Guidance Quarterly, December 1967, Vol. 16, No. 2, p.p. 104-112.