SOME GUIDELINES FOR TEACHER EDUCATION

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"The program of agricultural education in public schools when properly organized under the direction of an effective teacher makes significant contributions to both the vocational and general educational needs of the pupils enrolled." This statement was Dr. Joe P. Hall's \(^{1}\) initial conclusion from the findings of a study entitled "Agricultural Education at the High School Level in Arizona" which he recently completed.

Objectives of the Study

This research was timed to provide working information for the further development of occupational training in agriculture under the provisions of the Federal Vocational Education Act of 1963. The purpose of the study was to develop a list of valid guidelines for use in modifying and improving programs of agricultural education to serve the needs of high school youths. Attempts were made to determine: (1) What are the strong and weak points of present programs?, (2) What groups of students are not being served by present programs?, (3) What additional groups of students may profit from instruction in agriculture?, (4) What special programs may be developed to serve potential drop-outs and other disadvantaged youths?, (5) What contributions if any can agricultural instruction make to the general educational development of high school students?

\(^{1}\) Dr. Hall is Chairman of the Division of Agricultural Education at Cornell University. He was on sabbatic leave during the first half of 1964 and served as visiting research professor of Agricultural Education at the University of Arizona.
Procedures

The study was conducted cooperatively by the Agricultural Education Department of the University of Arizona and the Arizona Department of Vocational Education under the direction of a 15-member advisory committee of leaders in agriculture and education. This group included two leading farmers, one of whom served as chairman of the committee. Other members were as follows: the State Director of Vocational Education, the State Supervisor of Agricultural Education, an assistant vice president in charge of agricultural loans for a bank which has offices throughout the state, the Farm Placement Supervisor of the State Employment Service, an official of the major irrigation project in the state, two high school superintendents, two teachers of vocational agriculture, an official of a livestock feed company, the Dean of the College of Agriculture, the Director of Resident Instruction and the Head of the Department of Agricultural Education at the land-grant college.

Data used in the study were obtained by conferences, interviews and questionnaire, involving 276 selected individuals who were acquainted with high school departments of vocational agriculture in Arizona. Those supplying factual information and opinions included school administrators, teachers of vocational agriculture, guidance counsellors, school board members, parents of agriculture students, former students of agriculture and others. Information obtained from the printed questionnaires was supplemented by personal interviews with representatives from the above groups in 1/3 of the 35 Arizona high school communities that offer instruction in vocational agriculture.

Findings of the study consisted mainly of the reactions and comments of the respondents to 31 statements pertaining to proposed changes or modifications in programs of instruction in agriculture. The statements which were proposed guidelines or principles concerned three major phases of the program, namely, courses to be offered, occupational experience for students and the role of the Future Farmers of America.

Conclusions

Based upon the data gathered, review of related research, personal observations on visits to schools and interviews with school administrators, counsellors, teachers of agriculture, members of the Advisory Committee, and other lay and professional leaders, the following conclusions seem warranted: (1) The high school course requirements and schedules should permit any interested pupil to enroll in agricultural courses regardless of sex or place of residence (farm, village, town, or city), (2) The high school course in agriculture should meet the needs of those who plan to enter any occupation in agriculture, also those who will pursue post-high school education in agriculture, (3) The beginning courses in agriculture should include basic principles of science related to agriculture and provide opportunity to explore career possibilities in the field, (4) Additional course content and titles (advanced high school and post-high school) should be based upon the abilities needed by workers in groups of related occupations in agriculture, (5) Occupational experience in agriculture is highly desirable as part of a program of instruction in agriculture at the high school level, (6) Provision for occupational experience is a joint
responsibility of the pupil, his parent and/or employer, and the school. (7) The occupational experiences should be under the supervision of the teacher of agriculture and be of such scope and duration as to provide competencies needed by beginning workers in the occupation. (8) Membership in the Future Farmers of America organization should be open to any pupil enrolled in an agricultural course. (9) Pupil activities in the Future Farmers of America organization should be limited to those which contribute to the educational objectives of the instructional program in agriculture. (10) Major emphasis in the Future Farmers of America organization should center upon the development of desirable personal and social abilities of the individual, including traits of leadership.

Recommendations

As an outgrowth of the foregoing conclusions, Dr. Ball, with the assistance of the Advisory Committee developed the following recommendations: (1) Continue efforts to provide teachers of agriculture with suggested course guides and units of instruction. Specifically, it is recommended that course guides for Agricultural Mechanics I and II be developed if this is accepted as a regular offering, (2) Make changes in the proposed horticulture course guides based upon the experiences of the teachers and administrators involved in the program. (3) Develop a list of guidelines for establishing and operating school land laboratories, and establish pilot land laboratories which can be evaluated in terms of their contribution to the educational program. (4) Review policies and practices regarding state-wide judging contests. Continuously review contests to reflect the subject matter taught in the local school programs in agriculture. Urge teachers to enter only those contests which are a part of the instructional program in their schools. (5) Review and evaluate FFA Activities on the local and state level on the basis of teacher and pupil time involved in relation to educational outcomes. (6) Urge each teacher of agriculture to evaluate his use of professional time during the summer months. Establish policies on the local level regarding maximum days away from the school and community, including professional improvement activities, FFA, etc. (7) Continue efforts to make the agricultural program a "part" of the local school system, with the teacher of agriculture, the FFA organization, and all other aspects of the program subject to the local school policies and regulations. It is suggested that policy statements regarding the department of agriculture be developed as part of annual and long-range programs. (8) Continue to urge each department to organize and use an advisory committee. (9) Keep school administrators informed of developments in agricultural programs, both local and state-wide. (10) Make certain that guidance counselors are well informed concerning the program and the students enrolled. Keep the needs of students foremost. (11) Explore possibility of joint programs with other vocational education fields, particularly business and distributive education. (12) Continue to offer in-service training programs in the emerging areas of course content to provide teachers with needed competencies. Recognize the need for more specialized training at the undergraduate level for those who plan to teach in specialized areas. (13) Establish an advisory committee for agricultural education at the state level to help guide the future development and expansion of the program. (14) Continue and expand the program of systematic evaluation of the educational outcomes of instructional programs. Revise the present list of evaluative criteria to reflect new objectives and standards.
The report on the study also included recommended lists of course titles in agriculture for (1) small (less than 200 enrollment) high schools, (2) medium size (up to 500 enrollment) schools, (3) large rural, urban or suburban schools and (4) large city schools.

Some Implications for Teacher Education

Since this research was directed toward the improvement of the total program of agricultural education at the high school level, the findings include some significant implications for teacher education. The following may serve as useful guidelines for the further development of both pre-service and in-service programs: (1) Modify curricula for prospective teachers to provide more specialization in selected areas of agriculture, (2) Provide more basic courses in all areas of the curriculum with emphasis upon principles to aid the teacher in keeping abreast with changing practices in education and patterns of occupations, (3) Include pre-service courses in the training program related to agri-business and/or off-farm occupations in agriculture, (4) Provide more flexibility in the training curriculum to allow majors in other departments of the College of Agriculture to complete a double major or to qualify for a minor in agricultural education, (5) Include basic content on student counseling and guidance in the pre-service program or early in the graduate program for beginning teachers, (6) Include both theory and practice in the use of land laboratories, and related facilities and student work experience as a part of the pre-service program for teachers, (7) Provide an organized program for trainees with inadequate agricultural experience, to obtain minimum occupational competence in farming and/or other agricultural occupations, (8) Evaluate and upgrade professional course content on philosophy, programs and practices concerning the role of the FFA toward the attainment of the new objectives for vocational education in agriculture, (9) Offer both pre-service and in-service professional courses in cooperation with other vocational areas to strengthen the teacher's competence to prepare people for jobs that cut across present vocational department lines, (10) Plan and conduct programs of basic and action research, including pilot and demonstration projects to continually renew both theory and practice, in occupational preparation, (11) Assume the leadership for developing and/or improving: a) Content guides for basic or core courses in vocational agriculture, b) Guides for special unit courses in a broad range of agricultural areas for farm and off-farm occupations, c) Evaluative criteria for use in upgrading programs of instruction in vocational agriculture at all levels.