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Pilot Programs in Off-Farm Agricultural Occupations

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PILOT PROGRAMS IN
OFF-FARM AGRICULTURAL OCCUPATIONS

Objective I

Emphasis should be placed upon development of educational programs to prepare and upgrade persons for off-farm agricultural occupations in South Dakota. Formal preparation is imperative and should be made available in a state where most of the income is derived from agriculture. -- Gadda, H. W., and James Pollmann. "South Dakota Agricultural Off-Farm Occupational Opportunities and Training Needs," Bulletin 553, South Dakota Agricultural Experiment Station (Agricultural Education, Education Department), 1969.

The above study reported an anticipated need for 2,485 new workers with competencies in agriculture in South Dakota by 1972. Of the new job titles for new workers, 97.4% were above the unskilled level. While nearly 90% of the firms desire workers who had at least a high school education, they also wanted young workers. Sixty percent of the employers preferred new agricultural workers 19 to 34 years of age.

Assuming South Dakota State University will continue to prepare the major share of professional off-farm agricultural workers needed in South Dakota, the developing area vocational-technical schools and the 65 public school programs of vocational agriculture will need to prepare the remaining workers. Since the area vocational-technical schools are currently expanding programs to meet the needs of technician level occupations, vocational agriculture programs at the secondary level must assume their increasing responsibility in preparing off-farm agricultural workers with less than technical level skills.

The Vocational Education Act of 1963 expanded the role of vocational education in agriculture to include preparation for entry into off-farm agricultural occupations. Yet the cooperative occupational experience programs have continued to be operated largely in production agricultural areas. This is the result of a number of legitimate influences including traditional program success and the importance of production agriculture to South Dakota's economy. With increasing technology, there has been and will continue to be an expansion in the off-farm agricultural support industries and services. The accompanying occupational roles requiring agricultural competencies have demanded and will continue to demand an expansion of secondary cooperative occupational experience programs to include more off-farm occupational training.

The purpose of cooperative occupational experience programs is to provide a realistic learning environment in which the students can develop competencies in their chosen occupation.

To make a program cooperative and educational, it is expected that:

The school will provide related and relevant classroom instruction and on-the-job supervision,

The agricultural business will provide supervision in occupational activities which will develop competencies necessary for entry into and progression in the student's chosen occupation, and

The student will strive to fill the role of the business employee and student-learner.

Instruction dealing with the cooperative occupational experience program in off-farm occupations has been presented to most vocational agriculture instructors in South Dakota. The delayed emergence of programs with emphasis upon off-farm occupations demands inquiry. It suggests that South Dakota vocational agriculture instructors have need for additional information concerning organizational and administrative models, curriculum materials, and demonstration pilot programs.

The central problem of this total research effort is the slow emergence of emphasis on diversified cooperative off-farm agricultural occupations training in high school vocational agriculture programs. The primary goal is to increase the number of programs which adequately meet the needs of students who are preparing for off-farm agricultural occupations. The first project objective is reported here. Objective I was to identify the present efforts in agricultural off-farm occupations training in South Dakota including the identification of program needs and resources.

PROCEDURE

A questionnaire was designed to determine:

- (1) the number of departments placing students in off-farm agricultural cooperative occupational experience programs including the number of students involved, type of occupational placement, how they were enrolled in the related classroom instruction;
- (2) the school and community resources including the instructor's time, adequacy of the vocational agriculture room, and identified or estimated number of training stations;
- (3) vocational agriculture instructors' attitude toward off-farm programs including the instructor's opinion of the sufficiency of numbers for the program, their contacts with local agri-businessmen concerning training stations, their explanation of program to superintendent, principal, board, and businessmen, their use of local advisory groups, and their plans to start work in the off-farm agricultural occupations area;
- (4) teacher's evaluation of expressed student interest in off-farm agriculture occupations;
- (5) the reaction of administrators and local school boards to teacher explanations of off-farm supervised occupational experience programs, and
- (6) questions asked by or of the instructors.

The questionnaire was mailed to the 64 South Dakota schools offering vocational agriculture in 1970-71. Fifty-seven questionnaires were returned. Since in many cases the information was sought through simple questions or imperative statements, the author chose to categorize similar responses into logical, though subjective, categories.

RESULTS

Current Enrollments.

Instructors were asked to report the total number of students in their schools by grade, 9 through 12. Only 23 instructors reported this information as requested. Eight instructors misinterpreted the question to mean only boys. A frequency distribution of class enrollments was prepared (see Table 1). The majority of the instructors reported enrollments of less than 60 students in each of the respective class levels. Since five schools had class enrollments of 91 or more, the mean was not judged to be an appropriate measure of central tendency or predictor of average class size in South Dakota.

Table 1. Frequency Distribution of Total Class Enrollments Reported by 23 Responding Instructors.

| Class Year | Number Enrolled | | | |
|------------|-----------------|----------|----------|------------|
| | 30 or less | 31 to 60 | 61 to 90 | 91 or More |
| 9 | 6 | 8 | 4 | 5 |
| 10 | 8 | 8 | 2 | 5 |
| 11 | 7 | 9 | 2 | 5 |
| 12 | 9 | 7 | 2 | 5 |

Data for the five large schools were removed to allow calculation of adjusted means for total class enrollments and for vocational agriculture class enrollments. The adjusted means were more representative of the schools in South Dakota with vocational agriculture programs (see Table 2).

Table 2. Adjusted Means for Total Class Enrollments and Vocational Agriculture Class Enrollments for 18 Reporting Schools (23 less 5 Large South Dakota Schools).

| Mean | Grade Level | | | |
|-----------------------------------|-------------|------|------|------|
| | 9 | 10 | 11 | 12 |
| Total Enrollment | 42.8 | 39.2 | 38.1 | 36.6 |
| Vocational Agriculture Enrollment | 14.2 | 11.3 | 10.9 | 10.3 |

The number of vocational agriculture students placed in off-farm occupational experience programs was reported by grades: grade nine, 13; grade ten, 20; grade eleven, 31; and grade twelve, 70. Three instructors reported indistinguishable information, and, of the 54 reporting, 32 reported zero vocational agriculture students placed, four reported one, six reported two to five, nine reported six to ten, and three reported 11 or more.

Instructors who reported students placed in off-farm occupational experience programs listed the number of students by type of occupational placement (see Table 3). Some of the instructor responses have been classified into generally recognized business categories or job titles. The great diversity in the placement area suggested that it would not be appropriate to limit the specificity of the placement categories. An inconsistency is

apparent from this information. Six students were placed for production agriculture experience on farms, not off-farm. Agricultural mechanics, elevator operations, and landscaping and groundskeeping were the three major cluster areas of placement.

Table 3. Number of Students Placed in Off-farm Occupational Experience Programs by Type of Occupational Placement

| <u>Type of Occupational Placement</u> | <u>Number Reported</u> |
|--|------------------------|
| Landscaping and groundskeeping | 10 |
| Farm building construction | 7 |
| Mechanics (including auto) | 12 |
| Other | 1 |
| Implement business | 8 |
| ASCS | 1 |
| Farm service store | 1 |
| Meat processing | 6 |
| Grain - Feed - Fertilizer | 2 |
| Elevator | 5 |
| Seed cleaner | 1 |
| Morrells | 1 |
| Service station | 7 |
| Custom cornsheller | 1 |
| Farm work | 6 |
| Grocery store | 2 |
| Sheep shearing | 1 |
| Electrician | 3 |
| Plumbing | 2 |
| Trucking | 2 |
| Dairy processing | 2 |
| Welding | 4 |
| Lumberyard | 3 |
| Bakery | 1 |
| Veterinary aid | 3 |
| Potato processing | 1 |
| Custom combining | 1 |
| Farm insurance | 1 |
| Hardware | 2 |
| Newspaper | 1 |
| Feedmill | 4 |
| Cheese factory | 2 |

The instructors also were asked, "How do you handle the related class instruction phase of the off-farm occupations program?" Thirty-five of the 57 responding instructors indicated they did not offer an off-farm occupations program and consequently related class instruction was not an operational aspect of their program. In this sense the question was not appropriate for 61.4% of the responding instructors.

Four instructors indicated their students placed in off-farm occupational programs received no related classroom instruction. In other words, 18.2% of the 22 instructors who provided off-farm occupational programs felt they made no special effort to provide class instruction related to the specific off-farm agriculture occupation placement of the students enrolled. Regular vocational agriculture III and/or IV (class year) enrollment was

reported as the method of enrollment for related class instruction by 15 of the 22 instructors reporting (68.2%). Four instructors indicated they enrolled students in an off-farm agricultural occupation class designed to serve all areas of off-farm agriculture. Two of these individuals also indicated this was their regular agriculture III or IV offering. The latter two programs appear to be meeting the criteria for what is described as a diversified agricultural occupations program (production and off-farm agricultural competence development objectives within a single class). One instructor indicated he enrolled students in a class designed to serve a specific area of off-farm agriculture, mechanized agriculture.

It appeared that only 22.7% of the instructors reporting offerings in off-farm occupational programs provided related class instruction to specifically support the off-farm occupational placement experience.

School and Community Resources

The instructors were asked to report their daily schedule. There were only limited variations of the traditional 50- to 60-minute class module and classes were equated on this basis. The preparation period was ignored since it was not reported in many cases. The number of "class periods" which were specifically assigned were counted and categorized into three classifications: vocational agriculture related, vocational agricultural supervision, and other. A percent of time assigned to vocational agriculture was calculated for each reporting instructor. Sixty-eight of the class periods were specified in the category "other," 14 in the vocational agriculture supervision category, and 203 as vocational agriculture related. Three instructors reported being assigned to four class periods, 31 to five, 15 to six, and three to seven class periods.

The average instructor reporting spent 75% of his time in assigned class periods related to vocational agriculture exclusive of assigned preparation time. Ten instructors reported 100% of their time was assigned to vocational agriculture. Sixteen instructors reported that 60% or less of their class time was assigned to vocational agriculture. Two instructors who also served as principal were not assigned a percent of time figure since they did not indicate time for the principalship.

The teachers were asked "What obstacles would you need to overcome to allow you to free 1 hour per day for additional work in off-farm agriculture including supervision of occupational experience?" Their responses were categorized into 18 topical areas (see Table 4). Developing program support was an obstacle identified by 13 of the instructors. The need for changed school schedules was an obstacle for eight instructors. Release from classes other than vocational agriculture or other time commitments were reported obstacles 28 times.

Table 4. Frequency of Reported Obstacles To Be Overcome to Allow Reporting Vocational Agriculture Instructors to Free One Hour per Day for Additional Work in Off-Farm Agriculture Including Supervision of Occupational Experience

| <u>Obstacle</u> | <u>Times Reported</u> |
|--|-----------------------|
| Current school schedule | 8 |
| Release from classes other than vocational agriculture (general shop, science, auto mechanics) . . | 7 |
| Release from study hall assignment | 6 |
| Scheduling of time for supervision | 5 |
| Time for principalship duties | 2 |
| Other release related responses | 8 |
| Need for additional Vo-Ag instructor | 4 |
| Need for additional instructor (not Vo-Ag) | 7 |
| Program support (administration, board, businessmen) . . . | 13 |
| Need for more training stations | 7 |
| Adjustment of Vo-Ag offerings | 3 |
| Enrollment to justify program | 3 |
| Training for instructor | 2 |
| Teaching materials | 3 |
| Better facilities | 2 |
| Transportation to training station | 2 |
| Financial support | 1 |
| Absence of State Department definition of a full time Vo-Ag position | 1 |

Instructors evaluated the adequacy of their vo-ag classroom by responding to the question, "Is your Vo-Ag room large enough to allow you to handle an independent study approach to various occupational roles?" The replies were placed into three categories: yes, undecided, and no. This was a subjective procedure; however, in most cases the responses were a yes or a no with qualifying comments. Twenty-three instructors indicated they had an adequate vo-ag classroom for an off-farm agricultural occupational instruction program, six appeared undecided and 26 indicated an inadequate facility.

To determine the potential number of training stations instructors were asked to respond to one of two questions: "...how many training stations have you identified in your school service area?" or "...how many training stations would you estimate are available in your service area?" (see Table 5). The modal number of training stations identified was five and the modal number estimated was two.

Table 5. Number of Training Stations Identified or Estimated As Available Within Reporting Instructor's School's Service Area.

| Instructors Who | Number Reported | | | | | |
|-----------------|-----------------|---|-----|------|------------|---------|
| | Not Sure | 0 | 1-5 | 6-10 | 11 or more | Range |
| Identified | 3 | 0 | 10 | 11 | 3 | 1 to 42 |
| Estimated | 3 | 1 | 17 | 6 | 2 | 0 to 15 |

Attitude Toward Off-Farm Programs

In response to the question, "Do you have sufficient number of juniors and seniors to offer a program of instruction (on-the-job and classroom) in off-farm agriculture occupations?", 38 instructors replied yes and 18 instructors replied no.

Twenty-seven instructors indicated they had "contacted local businesses concerning the possibility of their cooperation in serving as training stations for student learners..." Twenty-nine indicated they had not contacted any-one.

Instructors were asked if they had explained the off-farm agriculture phase of vocational agriculture to their administrators and/or local school board. The responses were: superintendent, 34 yes and 16 no; principal, 36 yes and 16 no; and board, 8 yes and 40 no.

There were 25 yes and 30 no responses to the question, "Have you explained the off-farm agricultural phase of vocational agriculture, particularly the supervised occupational experience placement, to the men in agriculture business?"

One instructor reported using a local advisory group in planning the off-farm agriculture occupations phase of his program. This particular group constituted for the purpose of specifically providing advisory input into this phase of the program. Forty-eight instructors indicated they had not used a local advisory group in planning the off-farm program.

The instructors were asked if they had plans to start work in the off-farm agricultural occupations area. Nineteen responded yes and 25 responded no. Those responding yes were also asked to indicate "Estimated Starting Date" and "Anticipated Occupational Content Areas of Instruction." Thirteen instructors estimated they would be starting work in the off-farm agricultural occupations in the 1971-72 school year, two estimated their starting date as 1972-73, and one estimated his starting date as 1974-75. Limited response occurred to the "Anticipated Occupational Content Areas of Instruction" statement. Four instructors indicated a diversified approach was anticipated and two indicated a specialized approach was anticipated.

Evaluation of Student Interest

In response to the question, "How many juniors and seniors enrolled in your school have expressed an interest in off-farm agricultural occupations training?", 10 instructors reported zero, 17 reported one to five, 13 reported 6 to 10, four reported 11 or more, and 10 did not respond (see Table 6).

The instructors responded to the qualifying question, "Would the number you indicated above be typical for a normal year in your school?" (see Table 6). Yes responses were given by 36 of the 44 instructors who responded to the original question. Five of the 10 instructors reporting zero interested students indicated this was a typical number as did 15 of the 17 instructors reporting one to five interested students, 12 of the 13 instructors reporting 6 to 10, and four of the four instructors reporting 11 or more.

Table 6. Expressed and Estimated Student Interest in Off-Farm Agriculture Occupations Training and Reporting Teachers' Evaluations of Typicalness of the Expressed Interest.

| Instructor Response | Number of Students Interested | | | |
|---|-------------------------------|--------|---------|------------|
| | 0 | 1 to 5 | 6 to 10 | 11 or more |
| Expressed Interest | 10 | 17 | 13 | 4 |
| Yes--Typical Number | 5 | 15 | 12 | 4 |
| Estimated Number for No (Not typical interest) | | 8 | 4 | 1 |

Fourteen instructors responded no, indicating they did not feel the number reported as having an interest in off-farm agriculture occupations training was typical of a normal year in their school. They were asked "...what would be your estimate for the number interested, for a normal year in your school?" Twelve of the 14 instructors estimated a higher number would be interested in a normal year. One did not make an estimate.

Reaction to Teacher Explanations

Instructors were asked to indicate if they had explained the off-farm agriculture phase of vocational agriculture to their superintendent, principal, or board. Persons who responded yes were asked to indicate the response of the superintendent, principal, or board.

Their evaluation of their superintendents' responses were classified by the author into five subjective categories: 12 were favorable, 12 were favorable with qualification, five were asking for more information, three were concerned with endangering existing programs, and three were not interested. Appendix A contains the abstracted responses.

Instructor evaluations of their principals' responses were classified by the author into seven subjective-judgmental categories: 15 were favorable or positive, six were favorable with qualifications, one was "neutral," four were negative generally stating "...teaching schedule and budget do not allow..." five were negative generally stating "...let other programs handle or do not affect other programs..." three questioned need or were uninterested and two were "I am the principal." Appendix B contains the condensed responses.

Instructor evaluations of their school boards' responses were classified by the author into three subjective-judgmental categories: four evaluations were "favorable or positive," three were "favorable with qualifications, and one was "questionable in reaction." Appendix C contains the condensed responses.

Questions Asked

The instructors who indicated they had explained the off-farm agricultural supervised occupational experience placement to agriculture businessmen were asked to indicate the most frequently asked questions. The questions reported were categorized for summary purposes into 10 areas (see Table 7).

Those instructors who indicated they had visited with businessmen about the off-farm agriculture phase were also asked to respond to the question,

"What procedure did you use in explaining the program?" The responses indicated that informal visits and conversation was the procedure employed by 16 of the instructors. In addition, three instructors spoke at local business organization meetings. Two instructors prepared handouts for the businessmen visited. Two instructors used a publication as an introduction to the subject. Three instructors reported using a survey procedure to develop interest and gather information.

If the instructors checked "No" in response to the question, "Have you explained the off-farm agriculture phase of vocational agriculture to your administrator and local board?", they were asked to indicate "...what type of information would you like to have to assist you in preparing to explain the off-farm agriculture phase of vocational agriculture?" The instructors' comments were classified into six categories which were judged to encompass the general intent of their responses. While some instructors made no comment others asked for more than one category of information. The requests were: program organization information, 10; information on existing programs, six; curriculum materials, four; data on needs for and values of off-farm occupational experience, five; how to talk board into new courses and/or additional help, two; and film explaining program, one. Appendix D contains the categorized responses.

Table 7. Frequency of Questions Asked Instructors Who Explained the Off-Farm Agricultural Phase of Vocational Agriculture to Local Businessmen.

| <u>Generalized State of Question</u> | <u>Frequency</u> |
|--|------------------|
| What type of wage must be paid? | 12 |
| How many and/or what hours would the students work? | 11 |
| What are the objectives and organizational-administrative procedures? | 6 |
| Who selects students for placement--are they competent--can I release them? | 5 |
| What will the additional cost and disadvantages be? | 4 |
| What will I gain by cooperating? | 3 |
| What are the legal aspects? | 2 |
| Will students be placed seasonally? | 1 |
| How many students are involved? | 1 |
| Will students be expected to perform as a full-time employee in 4 to 6 months? | 1 |

IMPLICATIONS

Total Enrollments

The limited enrollment data reported may have suggested that the instructors felt this information was available elsewhere. The total class enrollments reported do support the rather widely recognized fact that most schools in South Dakota have limited enrollments. While the problems of small schools are many and frequently discussed, two problems are relevant to this study. First, the size of instructional staff will necessarily be limited if the per pupil cost of instruction is to be kept within the "low cost category" or within the same range as relatively large schools within the same geographic area. Second, the number of "subjects" offered will be limited.

The adjusted means for vocational agriculture class enrollments (23 schools reporting less 5 large schools) were not typical of vocational class enrollments. The adjusted class means for the junior and senior classes were 10.9 and 10.3 respectively. It would appear that the organization of a separate cooperative off-farm agriculture class for juniors and seniors would be hard to justify in many South Dakota schools because the potential enrollment is quite limited. This is particularly true if the enrollment now served is near the total of potential vocational agriculture students. It would also appear that a number of the relatively large South Dakota schools should be able to justify the organization of a separate cooperative off-farm agriculture class for seniors and juniors.

With a total of 128 students reportedly placed in off-farm occupational experience programs in 22 of the 54 reporting schools, it is rather obvious that a majority of the vocational agriculture programs have not adequately utilized the community agribusiness resources nor encouraged the use of off-farm supervised occupational experience programs. It would appear that the vocational agriculture instructors need more information on the career objectives of their students or need to utilize the available information more effectively. The probability that nearly half of the vocational agriculture programs in South Dakota do not have students with career objectives other than production agriculture is remote.

The diversity of off-farm placement areas suggested that the occupational interests of students are indeed varied and the variety of agribusinesses is similar in most communities. An independent study approach would appear as an efficient approach for presenting the occupational specific information and competencies. It would also appear logical to use a considerable portion of the students' classroom time for development of competencies with common abilities to most agribusinesses.

The fact that 15 of the 22 instructors reporting placement of students simply provide the regular vocational Agriculture III and/or IV (class year) enrollment can be interpreted in different ways. It may be that they are only providing what is defined as a work experience in off-farm agriculture. There is no specific training plan, supervision is limited, and related classroom instruction is not specific to the placement occupation. While this effort is far better than no placement in off-farm agriculture, it is not adequate in a truly vocational program.

Since only five instructors reported offering classes that provide instruction specifically related to off-farm occupational placement, it may simply be the logical approach to enroll students who desire supervised occupational experience in the vocational Agriculture III and/or IV and adjust the curriculum to include the essential related classroom instruction.

School and Community Resources

Since the average instructor reporting spent 75% of his time in assigned class periods related to vocational agriculture exclusive of preparation time, it would appear possible to schedule the vocational agriculture instructor for an off-farm occupational experience program--particularly on-the-job supervision. This might demand the addition of staff to handle the non-agricultural classes the vocational agriculture instructor formerly taught. What may be needed is the evidence to show that the instructor's total contribution to the school systems productivity would be greater if he were assigned to the off-farm occupational experience program.

The instructors need to develop local administration and school board support for off-farm occupational experience programs. This is a rather obvious need if one plans to introduce any new programs or procedure. It also may suggest that sales skills and material must be developed relative to the off-farm phase of vocational agriculture. The limited flexibility of school schedules in limited size districts is a problem to be contended with in introducing off-farm agriculture. A cooperative administration and faculty will be essential if a schedule change is to be made.

The most common perceptible obstacle facing South Dakota vocational agriculture instructors who would hope to have free time for additional work in off-farm agriculture is the need to be released from classes other than vocational agriculture. The fact that 49 out of 52 reporting instructors were assigned to five or more class periods not including preparation time would suggest that administrators have not allowed adequate time for instructor supervision of occupational experiences in production agriculture, to say nothing of off-farm agriculture. This is supported by the fact that only 12 of 52 instructors were assigned time for supervision of vocational agriculture students. It would appear that the instructors must first convince their administrators of the importance of adequate supervision of occupational experience programs within the production agriculture area if they would hope to provide vocational education in agriculture, even production agriculture. The development of a more realistic conception of vocational education in agriculture will be necessary if support is to be forthcoming for off-farm agriculture programs.

If independent study is to be incorporated in the classroom related instruction for off-farm occupations a majority of the vo-ag classroom facilities will apparently need to be improved. This improvement would seem desirable for the already existing programs.

The average South Dakota community might be expected to have 5 training stations. This suggests the need to develop a procedure for systematically identifying potential training stations. It is also worth noting that estimated numbers were considerably lower than the identified number. Attitude may be an important factor in finding training stations. It may also be realistic to recognize that training stations may be a limiting factor in determining class offerings in off-farm agriculture. The separate class meeting state required as a cooperative vocational education program (300 hours of occupational experience) may be an unrealistic goal in many communities if all students who are qualified are to be given an opportunity for off-farm agriculture occupational experience.

Attitude Toward Off-Farm Programs

Approximately two-thirds of the instructors indicated they had sufficient numbers of juniors and seniors to offer a program of instruction in off-farm agriculture occupations. However, less than 43% of the instructors planned to start work in this area. Either instructor attitude or school organization obstacles will apparently need to be changed before a majority of the vocational agriculture programs in South Dakota incorporate instruction in off-farm agriculture into present programs. It would also appear that current vocational agriculture offerings should be objectively evaluated in terms of the occupational placement of program graduates.

Since less than half of the reporting instructors had contacted local agribusinessmen concerning work stations or even explained the off-farm

phase of vocational agriculture to local agribusinessmen, it is obvious that change will need to begin with the vocational agriculture instructors. Instructors may need to incorporate the off-farm agriculture phase of instruction into their regular program and demonstrate the benefits of the off-farm program at the local level.

While approximately two-thirds of the instructors had explained the off-farm agriculture phase of vocational agriculture to their administrators, it is disheartening to see less than a 100% effort. However, it would appear that in-service education must provide cognitive information for the instructors in the hope that they will be able to explain a complete program of vocational agriculture.

With only one instructor reporting the use of an advisory group in planning the off-farm agricultural occupations phase of his program, a potential resource of considerable worth is apparently untapped.

The 25 negative replies to the question of starting work in the off-farm agricultural occupations implies that there are indeed obstacles to be overcome in expansion of this program.

Evaluation of Student Interest

While the data are very subjective, two implications may be revealed. A lack of information on operating programs may lead students to give responses which are not indicative of true interests in off-farm agriculture occupations training or a relatively high proportion of South Dakota vocational agriculture students may be production oriented or have other legitimate reasons for not expressing off-farm interest. The fact that 12 instructors believe there would be more interest in a typical year suggests the need for more information and exposure to the programs and career planning information in general.

Reaction to Teacher Explanations

While no clear edict was observed the positive evaluation of superintendents, principals, and board members responses were at least an indication that school personnel were receptive to the programs as explained.

Questions Asked

Questions asked by agriculture businessmen were basically information oriented. Wages and working hours were a major area of concern as one might expect. Obviously, instructors and administrators must understand the program to develop it at the local level. While individual contact was the most common method used in explaining the program, group meetings apparently can effectively answer the questions frequently asked.

Instructors apparently feel a need for more program organization information, curriculum materials, and program support data. This material should be made available to all departments on a routine or request basis. The problem may be one of having access to information when it is most needed.

RECOMMENDATIONS

In view of the presented implications, the following recommendations are made:

1. Vocational agriculture curricula should be objectively evaluated
2. Instructors should incorporate instruction in off-farm agriculture into the present programs to demonstrate the benefits of the off-farm phase at the local level.
3. Emphasis should be placed on the development of diversified cooperative off-farm agricultural occupations programs in schools enrolling less than 80 students per graduating class. Separate cooperative off-farm agricultural occupations programs should be part of the curriculum of the larger schools.
4. Independent study procedures should be facilitated to efficiently present job specific information and competencies while competencies with common application are developed by group procedures.
5. Instructor time for supervision of occupational experiences must be made available and used efficiently.
6. The Agriculture Division of the South Dakota Division of Vocational and Technical Education should gather evaluative data demonstrative of the productivity of instructors working with off-farm occupational experience programs.
7. Advisory groups should be developed and used for the local vocational agriculture programs.
8. School districts should develop stronger guidance programs and instructors should utilize career planning information in curriculum development and instruction.
9. Vocational agriculture instructors need to provide prospective students and enrollees with local program information and agriculture career planning informations.
10. Explanatory skills and materials must be developed for the off-farm phase of vocational agriculture.
11. A guide for establishing off-farm agriculture occupations programs should be developed and made available to instructors and other concerned persons.
12. The vocational agriculture classroom facilities should be improved to meet recommended standards.

SUMMARY

Slow emergence of off-farm agricultural programs in vocational agriculture in South Dakota was the problem studied. The first objective was to identify what efforts were being made in off-farm agricultural occupations including the identification of program needs and resources. A questionnaire was mailed to 64 schools offering vocational agriculture in 1970-71.

Thirty-two of the 54 reporting instructors reported no students placed off-farm. Only 143 students were reported as placed in off-farm occupational experience programs with agricultural mechanics, elevator operations, and landscaping-groundskeeping placements most common. Four instructors enrolled students in an off-farm agricultural occupations class.

Release from classes other than vocational agriculture or other time commitments, school master schedules, and developing program support were identified obstacles to additional work in off-farm agriculture.

Sufficient number of juniors and seniors to offer an off-farm program were reported by 38 instructors. Twenty-seven instructors had contacted businesses about serving in the off-farm area, but 25 did not. Juniors and seniors had expressed interest in off-farm agricultural occupations training in 34 of the reporting schools.

Instructors evaluated the majority of the responses of persons to whom they explained the off-farm phase of vocational agriculture as favorable. Wages, hours of student placement on the job, objectives and procedures, selecting students, cost advantages, and legal aspects were common concerns of agribusiness men contacted. Instructors wanted program information on existing programs, curriculum materials, justification data, and persuasion information.

Implications of the data were considered and 12 recommendations were made.

Appendix A. Instructors' evaluation of their superintendent's response to their explanation of the off-farm agricultural phase of vocational agriculture.

| | Frequency |
|---|--------------------|
| Favorable | Subtotal <u>12</u> |
| Most interested, will support | 1 |
| Good idea | 1 |
| Favorable | 2 |
| OK | 2 |
| No objections | 1 |
| Favorable, wants it here | 1 |
| Receptive | 1 |
| Believe he would like it here | 1 |
| Completely in favor of a program, will help get | 1 |
| Favorable, with qualifications | Subtotal <u>12</u> |
| Reasonably favorable | 1 |
| OK, but take it in addition to your present load | 1 |
| Go ahead if it will not hurt the present program | 1 |
| OK, but work it out with principal | 1 |
| Favorable, if done only 2 days a week in Ag III or IV | 1 |
| Favorable, if training stations could be made available | 1 |
| 100% for idea if aid to support (good for disadvantage) | 1 |
| Sounds good, do it after school | 1 |
| Interested if get a 2-man department | 1 |
| OK, but find the time | 1 |
| Favorable but is there a strong need | 1 |
| Good idea but no help to implement | 1 |
| Wanting more information | Subtotal <u>5</u> |
| Do we need it? | 1 |
| Study students' interest, business interest and cost | 1 |
| Reservations--small number in school and Vo-Ag, availability of work stations | 1 |
| Interested | 1 |
| Questionable | 1 |
| Might hurt other programs | Subtotal <u>3</u> |
| Have a T&I ed. program | 1 |
| Likes, but starting D.E. first | 1 |
| Let Vo-Tech school get underway first | 1 |
| Not interested | Subtotal <u>2</u> |
| Would have value, but I am retiring | 1 |
| Not enthused - lack of training stations | 1 |

Appendix B. Instructors' evaluation of their principals' responses to their explanation of the off-farm agriculture phase of vocational agriculture.

| | Frequency |
|---|--------------------|
| Favorable or positive | Subtotal <u>15</u> |
| Very favorable | 2 |
| Favorable | 6 |
| Interested | 2 |
| OK | 1 |
| Agrees | 1 |
| Very good | 1 |
| Positive | 1 |
| I believe, they would like it here | 1 |
| Favorable with qualifications | Subtotal <u>6</u> |
| OK, need more help - board doesn't want extra courses | 1 |
| Sounds practical | 1 |
| Favorable if training stations are available | 1 |
| OK, find the time | 1 |
| Yes, as soon as possible | 1 |
| Good idea - if no help or more time for ag | 1 |
| Teaching schedule and budget do not allow | Subtotal <u>4</u> |
| If had more time for Vo-Ag man, something could be done | 1 |
| Did not feel my load allowed it | 1 |
| OK, but cannot schedule | 1 |
| Operates within schedule and budget -- limits participation | 1 |
| Let other programs handle or do not affect other programs | Subtotal <u>5</u> |
| T&I program for this (confused!) | 1 |
| Cooperative program should fulfill this need | 1 |
| Work with D.E. to prevent overlapping | 1 |
| Let Industrial Arts take care of that (confused) | 1 |
| Let D.E. get started first | 1 |
| Neutral | Subtotal <u>1</u> |
| Questions need or uninterested | Subtotal <u>3</u> |
| Is there a need? | 1 |
| Reservations -- numbers, training stations | 1 |
| Little interest | 1 |
| I am Principal | Subtotal <u>2</u> |

Appendix C. Instructors' evaluation of their school boards' responses to their explanation of the off-farm agriculture phase of vocational agriculture.

| | Frequency |
|---|-------------------|
| Favorable and positive | Subtotal <u>4</u> |
| Very favorable | <u>1</u> |
| Favorable | 2 |
| Positive | 1 |
| Favorable with qualifications | Subtotal <u>3</u> |
| OK, find the time | <u>1</u> |
| Go ahead but do not hurt present program | 1 |
| Interested but waiting for administration's recommendations | 1 |
| Questionable | Subtotal <u>1</u> |

Appendix D. Instructors' responses to the question, "What type of information would you like to have to assist you in preparing to explain the off-farm agriculture phase of vocational agriculture?"

| | Subtotal | Frequency |
|--|----------|-----------|
| Program organization information | Subtotal | <u>10</u> |
| Organizational details | | <u>1</u> |
| Concept | | 1 |
| Student wages, hours, funding, and available help | | 1 |
| Equipment, time differences | | 1 |
| I need more background and knowledge | | 1 |
| Planning, starting, and follow-up or evaluation procedures | | 1 |
| A basic guide or an organizational plan to help get across the important parts | | 1 |
| Objectives | | 1 |
| Complete information | | 1 |
| Brochure explaining cooperative program | | 1 |
| Information on existing programs | Subtotal | <u>6</u> |
| List of what other instructors are doing | | 1 |
| More information about existing programs | | 2 |
| Success in other schools | | 1 |
| Ideas being used | | 1 |
| What has been done | | 1 |
| Curriculum materials | Subtotal | <u>4</u> |
| Program of study for particular businesses | | 1 |
| Sample off-farm program | | 1 |
| What to do to prepare students for off-farm occupations experience programs | | 1 |
| A proposal for a good off-farm program for S.D. including time required | | 1 |
| Data on needs and values of | Subtotal | <u>5</u> |
| Benefits shown | | 1 |
| Data on needs in area for board | | 1 |
| Information on uniqueness of program in Ag and benefits in S.D. | | 1 |
| Trends in off-farm employment | | 1 |
| Number of off-farm jobs, importance of training and possible incomes | | 1 |
| Film or filmstrip explaining program | Subtotal | <u>1</u> |
| How to talk board into new courses and additional help | Subtotal | <u>2</u> |
| How.. - an Industrial Arts department | | 1 |
| How.. - new courses and additional instructors | | 1 |

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