

CHARACTERISTICS ASSOCIATED WITH QUALITY SUPERVISED
OCCUPATIONAL EXPERIENCE PROGRAMS IN MONTANA

by

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This professional paper has been read by each member of the author's graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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ABSTRACT

This study determined the perceptions of Montana vocational agriculture teachers teaching in departments with less than sixty percent of their students conducting supervised occupational experience programs and sixty percent or more of their students conducting supervised occupational experience programs about teacher, community, local program and parent/guardian or employer characteristics associated with students participating in supervised occupational experience programs. Teachers also responded to a list of supervised occupational experience titles indicating if they would accept them as a supervised occupational experience program for their students.

This survey was administered to Montana vocational agriculture teachers during the 1985 summer update conference. Characteristics used in compiling a data base were gathered by using the Delphi Technique. The returned questionnaires were statistically analyzed and used a measure of central tendency mean and the deviations from the mean standard deviation.

Populations were divided into four different groups: 1) years of experience, 2) size of school, 3) size of vo-ag program, and 4) percent FFA membership. The data gathered reveal the average teacher in the state of Montana has over five years teaching experience, teaches in a school with over one-hundred students, has a department size of less than forty students and has over seventy-five percent FFA membership.

Respondents felt that: 1) teacher commitment to supervised occupational experience programs, 2) communities understanding the FFA and supervised occupational experience program, 3) local program with extended contract for on-site instruction, and 4) parent/guardian or employer support of agricultural education were the most important factors associated with students participating in supervised occupational experience programs. Teachers also indicated that: 1) teacher success with supervised occupational experience prior to entering teaching, 2) size of community, 3) other vocational mechanical course offerings in school, and 4) parents/guardian or employer previous vo-ag experience were the least important characteristics associated with students participating in supervised occupational experience programs.

CHAPTER I

INTRODUCTION AND METHODOLOGY

Introduction

Occupational experience programs have traditionally been the backbone of vocational agriculture instruction. Supervised Occupational Experience Programs (SOEP) are considered the "learning by doing" aspect of vocational agriculture and were originally required with the passage of the Smith Hughes Act in 1917. The SOEP has given vocational agriculture programs credibility and direction (Miller, 1984).

Supervised occupational experience programs are a unique feature of programs of vocational agriculture. It is one of the common elements that holds vocational agriculture together and simultaneously sets vocational agriculture apart from other instructional programs.

Supervised occupational experience (SOE) is a part of each of the three components of vocational agriculture; that includes FFA activities and classroom and laboratory activities. Each part of the vocational agriculture program plays an important role in preparing students for a career in the field of agriculture or agribusiness. Supervised occupational experience programs provide students with an opportunity to apply technical information learned in the classroom to actual job situations.

The importance of SOE for students is further emphasized in the Guidelines for Secondary Vocational Education in Montana (1979, p. 20) which states,

In addition to regular instructional activities, all vocational students enrolled in vocational agriculture classes (9-12) are required to plan and conduct a supervised occupational program that will be under the direct supervision of a vocational agriculture teacher.

Statement of the Problem

The purpose of this study was to determine the perceptions of Montana vocational agriculture teachers relative to community, local program, and parent/guardian or employer characteristics which would encourage a high percentage of secondary students to become involved in supervised occupational experience programs. This study will also identify some non-typical supervised occupational experience titles being accepted by vocational agriculture instructors to satisfy State standards.

Objectives

1. To determine the perceptions of Montana vocational agriculture teachers relating to:
 - a. characteristics which lead to a high percentage of students participating in a supervised occupational experience program;
 - b. characteristics associated with the teacher which lead to a high percentage of students participating in the supervised occupational experience program;
 - c. characteristics associated with the community which lead to a high percentage of students participating in the supervised occupational experience program;

- d. characteristics associated with the local program which lead to a high percentage of students participating in the supervised occupational experience program;
 - e. characteristics associated with parent/guardian or employer which lead to a high percentage of students participating in the supervised occupational experience program; and
 - f. characteristics associated with percent SOEP, teacher experience, school size, vo-ag program size, and percent FFA membership which are associated with a high percentage of students participating in the supervised occupational experience program.
2. To determine what type of activities students engage in which vocational agriculture teachers consider appropriate for supervised occupational experience programs.

Need for Study

The report, A Nation at Risk: The Imperative for Educational Reform (1983), put America's educational system at the front of public attention. While the report did not address vocational agriculture specifically, it made reference to the fact that vocational education should demand the same level of performance as the basic courses. Do vocational programs contain standards rigorous enough for today's "new basics"?

Program planners in vocational agriculture (vo-ag) need to look at all components of the program to determine if the goals and objectives are being met. One of the components of the vo-ag program originally

required in the Smith Hughes Act of 1917 was the "learning by doing," or the supervised occupational experience program. Is it as viable today as it was in 1917? Research throughout the United States has focused on that question and results indicate that SOE programs have continued to decline in quality and quantity. If vocational agriculture is to remain an important part of the school curriculum, it must strive to accomplish what makes it vocational--the supervised occupational experience programs.

A recent study by Shelhamer (1984) indicated that some Montana vocational agriculture programs are doing a poor job of involving students in SOEP, while other programs are doing an exceptional job. Why the difference? What characteristics lead to a high percentage of students conducting supervised occupational experience programs? What activities are students engaging in which could be considered eligible for supervised occupational experience? These questions need to be answered to bring all vocational agriculture programs to an acceptable level of participation in supervised occupational experience programs. Teachers, teacher preparation programs and students in the vocational agriculture field will benefit from answers to these questions. The vocational agriculture programs with high percentages of supervised occupational experience have the credibility to remain a part of the high school curriculum.

In summary, this study will identify those characteristics perceived by vocational agriculture teachers which lead to a high percentage of students participating in supervised occupational experience programs.

Definitions

Instructor: Teacher of vocational agriculture in a secondary school and advisor of the local FFA chapter.

Vocational Agriculture: An area of the high school curriculum which was established by the Smith Hughes Act of 1917.

SOEP: A part of the vocational agriculture instructional program designed to develop competencies in agriculture. May utilize facilities of home, farm, school or community business and industries. Programs include a variety of activities which may include production, placement or employment, observational and school laboratory.

Experimental Education: Education, training, production, study or other courses or projects conducted under a predetermined plan.

FFA: Future Farmers of America; national youth organization for individuals enrolled in vocational agriculture.

Non-Typical SOEP: Supervised occupational experience programs that are not directly related to agriculture production or agribusiness.

Form 2: Supervised occupational experience program summaries filed February 1st each year with State Office of Public Instruction, Vocational Agricultural Division, Helena, Montana.

Limitations

1. The population for the study was limited to high school vocational agriculture teachers currently teaching in Montana.
2. The population will be limited to those instructors attending the 1985 Vocational Agriculture Teachers Update Conference in Havre.

Assumptions

1. All SOEP experiences listed on the 1982-84 Form 2 are valid and that they qualify as an SOEP project.

Methodology

This section describes the manner in which the survey was developed and carried out. The discussion includes a description of the population, population identification, identification of non-typical SOEP titles, instrument design and distribution, and analysis of data.

Population

The population for the study was forty-seven secondary vocational agriculture instructors attending the summer update conference, who had taught in the state of Montana during the 1984-85 school year.

Population Identification

The sample was separated into two groups: 1) those with from zero to fifty-nine percent of their students conducting supervised occupational experience programs, and 2) those with sixty and over percent of their students conducting supervised occupational experience programs. Only teachers with two or more years in their present school system were considered in the plus-sixty category. A two-year minimum was selected because of two factors: 1) supervised occupational experience program reports are filed February 1st of each year and teachers with less than two years would not have a full year of SOEP experiences, and 2) the majority of supervised occupational experience programs are carried out during the summer. A teacher who had taught less than two years would

not have had the opportunity to follow up on his own classroom instruction and the supervised occupational experience programs. Teachers who met qualifications during the 1982-84 school years but changed schools were tracked to new schools.

The group, either high or low, within which a school was placed was determined by those teachers whose students had an average of sixty percent or more supervised occupational experience programs over the three-year period (1982-84). Teachers' failure to report their SOE program during any of the three years was considered to be in the low group, regardless of average. The percentage of SOEP participation was determined from the 1984 Supervised Occupational Experience Summaries (Form 2) which were on file with the State Office of Public Instruction, Vocational Agriculture Division, Helena, Montana. Care was taken to avoid duplication of students because many participating in supervised occupational experience programs conducted more than one program. The percent of students in schools having SOE programs in the 1982 and 1983 years was taken from research conducted by Dr. Van Shelhamer (1984).

Identification of Non-Typical SOEP Titles

A listing of SOEP titles was gathered from the 1984 Form 2. Twenty non-typical SOEP titles were selected by the researcher and subjected to the sample of vocational agriculture teachers for their reactions.

Instrument Design and Distribution

The researcher chose to use the Delphi Technique to identify data base information concerning characteristics important in conducting quality supervised occupational experience programs. The top ten instructors in Montana, as identified by the percentage of students participating in SOEP, were selected. Two alternate instructors were selected in the event that one or two of the top ten instructors could not participate. The instructors were asked to respond to the following four statements:

1. List five teacher characteristics that lead to a high percentage of students with SOEP.
2. List five community characteristics that lead to a high percentage of students with SOEP.
3. List five local program characteristics that lead to a high percentage of students with SOEP.
4. List five parent/guardian or employer characteristics that lead to a high percentage of students with SOEP.

Nine of the ten instructors responded to the questions in writing. One instructor chose not to respond.

Having collected basic data from teachers on the four areas, a questionnaire was developed. Advice from the researcher's graduate committee members, teacher educators and from the State Supervisor of Vocational Education was used to prepare an instrument. After several questionnaire revisions, a cover letter was prepared and the questionnaire was distributed to Montana vocational agriculture instructors at their annual 1985 Update Conference. The questionnaires were pre-sorted

in order to be able to identify those instructors with over sixty percent SOEP and under sixty percent SOEP. The completed responses were collected by teacher educators from Montana State University, who sorted them into their respective groups.

Analysis of Data

The completed questionnaires were entered into data file using an Apple-IIe computer and the VisiCalc program. The VisiCalc spreadsheet was set up to allow review of material entered for possible errors. The data were run using measure of central tendency mean and deviations from the mean standard deviations.

CHAPTER II

A REVIEW OF RELATED LITERATURE

Historical Background

Supervised occupational experience programs were included as a part of vocational agriculture since the program's inception with the Smith Hughes Act of 1917. The primary goal of vocational education in agriculture has traditionally been to prepare students for employment in the field of agriculture. To meet this goal teachers have used three basic components: classroom instruction, supervised occupational experiences, and Future Farmers of America activities. The importance of SOEP was summarized by Peterson and McCreight (1973) when they stated:

One of the first requirements of an agricultural educator is to have a real dedication and commitment to a supervised occupational experience program for every student. The 'heart and backbone' of a vocational agriculture curriculum is the supervised occupational experience program.

The Handbook on Supervised Occupational Experiences expresses the importance of SOE programs as follows:

Learning through supervised experience is a very effective and meaningful way of developing essential occupational competencies. Every program of vocational agriculture should involve each student in an occupational experience (FFA Foundation, 1982).

More recently, the National Commission on Secondary Vocational Education (The Unfinished Agenda, 1984) recognized the importance of

SOEP as a field-based learning program where actual experience is gained in the workplace or through community service, and made the following recommendation: "Field-based learning is grossly underutilized. Therefore, we recommend that supervised, field-based learning experiences be made available to all students."

Other researchers who have made reference to the importance of SOEP include Leising (1983), Shelhamer (1984), Long (1982), Vaughn (1983), and Rhodes (1983).

Supervised occupational experience programs have been the focus of much attention in recent years. The Agriculture Education Magazine devoted all issues during 1984 to SOEP themes. As important as SOEP is to the programs of vocational agriculture, research indicates that both quality and quantity of SOE programs are on the decline and that less than one-hundred percent of vocational students are participating in supervised occupational experience programs. Research by Iverson and Brown (1979) showed that nearly two-thirds of the vocational agriculture graduates in the southern part of the United States did not have SOE programs. In addition, Shelhamer (1984) in Montana, Long (1982) in Utah, Leising (1983) in California, and Vaughn (1982) in New Mexico revealed that less than one-hundred percent of the students enrolled in vocational agriculture carried out supervised occupational experience programs.

Decline in Quality

As the literature indicates, quantity of supervised occupational experience program activities carried out by students has declined.

However, a concern has also been expressed about the quality of occupational experiences that students are carrying out as part of their vocational agriculture experience.

Brinkley (1977) suggested that supervised occupational experience programs are not as strong as they once were: "The profession must develop a strong offense for the experience programs of our students. We had them at one time; we need them now. If we don't use them, we will end up teaching general agriculture."

The uniqueness of supervised occupational experience programs in agriculture presents a somewhat difficult problem for both teachers and students. Agriculture occupational opportunities for students have been changing dramatically and production is no longer the only source of supervised occupational experience. Emphasis includes not only production agriculture, but all aspects of the agricultural industry.

Shelhamer (1984) expressed concern about this shift from production agriculture to other agricultural sectors and the several problems such a shift presented for teachers of vocational agriculture. He further suggested that with the shift came more involvement for the students with high technology equipment; many employers may be unwilling to entrust students with this expensive equipment. Shelhamer also pointed out that some employers may be liable for those students under the age of sixteen and employers and teachers may not have the time necessary to prepare a student to work with high technology equipment.

Lee (1980) discussed possible reasons for the decline in SOEP:

The decline in how teachers feel about SOE may be due to many factors. One is the increased vocational program offerings in schools. There is a tendency for some vo-ag teachers to adopt the philosophy that: If

trade and industrial education teachers don't have to provide SOE, why should they? Another reason for the decline may be that in some schools only cooperative programs teachers are given responsibility for the experiential programs of students.

Another possible reason for the decline in the quality and quantity of supervised occupational experience programs is the fact that numerous students are taking vocational agriculture without a career objective in the field of agriculture.

Miller (1984) indicated that 2.6 percent of the students taking vocational agriculture and living on a farm planned to farm after graduation. He found, however, that an agriculture occupation other than farming was the goal of 13.9 percent of the students. A total of 16.5 percent of the students enrolled in production vocational agriculture programs were planning to pursue a career in agriculture. A similar study in Ohio (Gutheil, 1983) showed that almost half of the vocational objectives of production agriculture students were not related to agriculture.

The money incentives in non-agriculture jobs have caused students to select employment outside the field of agriculture. Current economic conditions in agriculture may also be limiting the opportunities for students to find work in agriculture.

Shelhamer (1984) related to the problem on students pursuing jobs in non-agriculture areas when he said:

Employment in a non-agriculture area creates problems for vo-ag teachers. Even though the student is employed, his or her experience doesn't relate to the agriculture field and therefore does not meet the requirements of the vocational agriculture program because it is not agricultural-related and likely doesn't fit the individual's agriculture career objective.

Factors Affecting SOEP

The number of students conducting supervised occupational experience programs varies widely among states as well as between schools within states. Participation by students in SOE programs in states ranged from 95.4 percent in Colorado (McCall, 1982) to 64.0 percent in California (Leising, 1982). The percent of students with SOEP's in Montana ranged from zero (failure to report) to over one-hundred percent in some schools. Over one-hundred percent was possible since students out of school often continue to hold membership in FFA and conduct supervised occupational experience programs.

Research has revealed several factors associated with the increased incidence of students conducting supervised occupational experience programs while they are enrolled in vocational agriculture. Long (1982) indicated that teacher experience was the most critical factor in distinguishing between those programs with a high percentage of SOE and those programs with a low percentage of SOE programs. Studies conducted by Zurbrick (1984) in Arizona, Vaughn (1983) in New Mexico, and Leising (1983) in California indicate that when students participated in FFA they also conducted an SOE program. Factors contributing to whether or not students conducted SOE programs were: 1) desire by the students to gain experience for a future career, 2) desire to make money, 3) required for the vocational agriculture program, 4) part of the grade, 5) number of visits by teacher, 6) student grade point average, 7) required to keep record book, and 7) type of city or rural school. Those variables which were not significantly associated

with students having supervised occupational experience programs included: 1) active in other school activities, and 2) planning on entering college.

Recommendations for Improvement

While several variables have been identified concerning their relationship to supervised occupational experience programs, the single most important contribution that can be made to improve SOEP participation is the development of state standards.

Crawford (1983) stresses the need for state standards to help vocational agriculture become more viable when he reported:

There is no question that SOE bridges the gap between school and employment. However, for SOE to be revitalized and become a viable part of all vocational agriculture programs, we must have quality state standards.

Zurbrick (1984) suggested that written state standards and policies regarding supervised occupational experience programs need to be put in place in all vocational departments and inservice training should be provided for all teachers. Rhodes (1983) reported that less than one-third of Arizona teachers have local written policies which speak to supervised occupational experience programs.

Summary

Getting students involved in supervised occupational experience programs is not a simple process. It seems important to clearly identify the characteristics associated with quality SOE programs so

that vocational agriculture teachers can work towards solutions. The literature indicates a continuing need for a strong SOE program in vocational agriculture.

CHAPTER III

RESULTS

The data gathered through survey was compiled into tabular form for ease of reporting. Data are reported in the following areas:

1. population,
2. SOEP comparisons by two subgroups,
3. SOEP comparisons by teacher tenure,
4. SOEP comparisons by school size,
5. SOEP comparisons by program size,
6. SOEP comparisons by FFA membership,
7. SOEP comparisons by rank of characteristics,
8. non-typical SOEP comparisons by SOEP subgroups.

Population

Table 1. Population size, number of respondents and percent returned by group.

Group	Attending Conference	Respondents	Percent
Vo-ag teachers in programs 59%-SOEP	27	26	96.3
Vo-ag teachers in programs 60%+SOEP	21	20	95.3
Combined	48*	46	95.8

* Note: Number of state vocational agriculture teachers is one less than should be to eliminate a response from researcher.

** Note: Number of conference attendees reflects only those vocational agriculture teachers who taught 1984-85.

The data in Table 1 indicate that forty-nine vocational teachers who had taught during the 1984-85 school year were in attendance at the 1985 summer update conference. The sample does not include recent graduates entering the teaching profession or former teachers returning to teaching that were in attendance at the conference. The researcher eliminated himself from the total number of vocational agriculture teachers, leaving a sample size of forty-eight. The questionnaire was distributed to twenty-six teachers in the less than sixty percent group and twenty in the sixty percent or over group. Two teachers left the conference before the questionnaire was administered. The response rate for the less than sixty percent group was 96.3 percent of the identified population and the response rate for the sixty percent and over group was 95.8 percent of the identified population.

Table 2. Responses by percent of SOEP's, teacher experience, percent FFA membership, vo-ag program size and school size.

Group	Category	Depts. 59%-SOEP				Depts. 60%+SOEP			
		No.	F	Mean	%	No.	F	Mean	%
Teacher experience	< 5 yr.	26	12	2.0	46	20	8	3.5	40
	≥ 5 yr.	26	14	12.1	54	20	12	12.8	60
School size	< 100	25*	9	51.8	36	20	9	48.2	45
	≥ 100	25*	16	432.0	64	20	11	206.0	55
Vo-ag program size	< 40	25*	14	28.4	56	20	13	27.5	65
	≥ 40	25*	11	58.0	44	20	7	50.6	35
Percent FFA	< 75%	25*	13	48%	52	20	7	61%	35
	≥ 75%	25*	12	96%	48	20	13	93%	65

Note: No. = number of responses in each category; F = frequency of each response.

* Note: Number of responses is one less because of two teachers in one school.

The respondents for the under-sixty SOE and plus-sixty SOE are divided into subgroups in Table 2. Respondents were broken into four subcategories as follows: 1) teachers with five years or less and teachers with over five years experience, 2) schools with less than 100 and schools with one hundred or more students, 3) departments with less than forty and departments with forty or more students, and 4) programs with less than seventy-five percent and programs with seventy-five percent or more FFA membership. The number of the less than sixty SOE is reduced by one because of a two-person department included in the sample.

The majority of teachers in both groups (54 percent, 60 percent) have more than five years teaching experience and average 12.1 and 12.8 years, respectively. The average tenure for less than five years of teaching experience was 2.0 and 3.5 years.

School size varied considerably with more larger schools being categorized in the less than sixty percent group (51.8, 432.2; 48.2, 206.0).

The size of the department indicates that the majority (56 percent, 65 percent) of schools in the state had less than forty students in the program. Again among larger vo-ag programs were found the less than sixty percent SOEP group (28.4, 58.0; 27.5, 50.6).

The highest mean percent of FFA membership (96 percent) was found in the less than sixty percent SOEP and plus seventy-five percent FFA membership categories. Other categories were as follows: 1) sixty percent plus SOE and over seventy-five percent FFA membership (93 percent), 2) sixty percent plus SOE and less than seventy-five FFA

membership (61 percent), and 3) less than sixty percent SOE and less than seventy-five percent FFA membership (48 percent).

SOEP Comparison by Two Subgroups

An examination of the data in Table 3 reveals teacher characteristics in achieving a high percentage of students with SOEP as based on an importance scale. All characteristics were considered important except being professionally involved in MVATA (2.96 by the less than sixty percent SOEP group). A higher standard deviation by both groups on the MVATA question indicates that the responses are more widely spread. Teacher characteristics most important to both groups were: 1) related well with students (4.12, 4.45), 2) commitment to SOEP (4.42, 4.75), 3) enjoys working with individual students and parents (4.46, 4.50), 4) time to communicate with students and parents (4.46, 4.25), 5) committed to vo-ag program (4.23, 4.45), and 6) ability to organize SOE supervision (4.31, 4.10). Areas considered less important to both groups were: 1) professionally involved in MVATA (2.96, 3.35), and 2) SOEP experience prior to entering teaching (3.08, 3.25).

Data in Table 4 reveal how the two groups of teachers perceived the importance of community characteristics as associated with student SOE programs. Two characteristics received high importance ratings by these respondents: 1) understanding the FFA and SOE program (4.42, 4.55), and 2) community strongly supports agriculture (4.27, 4.10). The respondents felt that size of the community (large versus small) was the least important (2.46, 2.70) of the community characteristics.

Table 3. Importance of teacher characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristic	Dept. 59%-SOEP		Dept. 60%+SOEP	
	Mean	SD	Mean	SD
Relates well with students	4.12	.71	4.45	.69
Wide variety of on-job experiences	3.73	.60	3.45	1.09
Commitment to SOEP	4.42	.76	4.75	.44
Professionally involved in MVATA	2.96	1.04	3.35	1.14
Knowledge in agriculture subject areas	4.15	.67	3.70	.86
Makes efficient use of time	4.12	.90	3.95	.76
Enjoys working with individual students and parents	4.46	.64	4.50	.51
Had vo-ag and FFA experience when in high school	3.42	.98	3.70	1.08
Searches for innovative types of SOEP's	3.62	.85	3.55	.60
Time to communicate with students and parents	4.46	.58	4.25	.55
Desire to help student achieve FFA recognition	4.00	.85	4.00	.79
Committed to vo-ag program	4.23	.86	4.45	.51
Participates in technical and professional workshops and conferences	3.46	.76	3.40	.94
Teacher is involved in the community	3.85	.92	3.95	.83
Ability to organize SOE supervision	4.31	.55	4.10	.71
Success of SOE experience prior to entering teaching	3.08	.79	3.25	1.12

Note: 5 = very important; 1 = not important

Table 4. Importance of community characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristic	Dept. 59%-SOEP		Dept. 60%+SOEP	
	Mean	SD	Mean	SD
Progressive school system	3.85	.61	3.40	.68
Unemployment conditions	3.81	.85	3.20	1.00
Former vo-ag members are still in the community	3.96	.77	3.35	.81
Basic community economy is agriculture/agribusiness	4.08	.69	3.90	.64
Community service area is agriculture-related	3.88	.81	3.70	.66
Understanding the FFA and SOE program	4.42	.57	4.55	.51
Expanding, forward-looking community	3.65	.56	3.55	.60
Community strongly supports agriculture	4.27	.77	4.10	.64
Size of community (large versus small)	2.46	1.06	2.70	.97
Majority of students live on farms/ranches	3.46	1.06	3.65	.74
Publicity available through local media	3.69	.84	3.55	.69
Stable community populations	3.62	.80	3.45	.89

Note: 5 = very important; 1 = not important

The less than sixty percent SOEP group felt that unemployment conditions (3.81, 3.20) and former vo-ag members are still living in the community (3.96, 3.35) were slightly more important than did the group with sixty-plus percent SOEP.

Local program characteristics displayed in Table 5 indicate that some important factors in the state of Montana correspond with those by Zurbrick (1984), Vaughn (1983), and Leising (1983) as being important factors affecting student participation in SOEP.

Teachers identified extended contract for on-site instruction as the most important factor affecting SOEP with a mean score of (4.77, 4.80). The sixty-plus group also identified as the most important factors: 1) SOEP is part of the vo-ag grade (4.25), 2) SOEP required of all students (4.35), 3) instruction on SOEP is given in the classroom (4.45), and 4) SOEP required of all FFA members (4.40).

The less than sixty group felt that the following were the most important factors: 1) administrative support for SOE (4.42), 2) instruction on SOEP is given in the classroom (4.38), 3) success of previous students in FFA and SOEP (4.35), and 5) curriculum based on community needs (4.31).

Class prerequisites required for advancement (3.35, 3.00), other vocational mechanical courses offered (3.04, 2.55), and active alumni association (3.08, 2.80) were deemed the least important by both groups of teachers.

The data arranged in Table 6 show the different perceptions between teachers with less than sixty percent SOEP and those with sixty percent-plus SOEP regarding parent/guardian or employer characteristics. Both group respondents agreed that the most important characteristics were: 1) supports agriculture education (4.50, 4.45), and 2) interested in students becoming involved in agriculture/agribusiness (4.46, 4.30); these groups disagreed widely on two characteristics: 1) actively

Table 5. Importance of local program characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristic	Dept. 59%-SOEP		Dept. 60%+SOEP	
	Mean	SD	Mean	SD
Extended contract for on-site instruction	4.77	.51	4.80	.41
School administrative support of SOEP	4.42	.57	4.15	.81
SOEP is part of the vo-ag grade	3.75	.95	4.25	.85
Active FFA Alumni Association	3.08	.97	2.80	.83
SOEP required of all FFA members	3.85	1.19	4.40	.94
High school credit given for SOE	3.35	1.05	3.55	1.15
Class prerequisites required for advancement in vo-ag program	3.35	1.06	3.00	1.03
Written goals and objectives for SOEP	3.96	.66	3.70	.80
Instruction on SOEP is given in the classroom	4.38	.57	4.45	.69
Success of previous students in FFA and SOEP	4.35	.75	4.05	.69
Recognition through proficiency and achievement awards	4.23	.82	4.10	.85
Curriculum based on community needs	4.31	.84	3.65	.87
Student required to set SOE goals	4.02	.80	4.15	.74
Other vocational mechanical courses offered	3.04	1.15	2.55	.99
SOE is required of all students	3.92	.93	4.35	1.09
Active program advisory council	3.88	.91	3.60	.99

Note: 5 = very important; 1 = not important

involved in vo-ag program (4.23, 3.60), and 2) knowledge about SOEP (4.54, 3.95).

Table 6. Importance of parent/guardian or employer characteristics in achieving a high percentage of students involved with supervised occupational experience programs.

Characteristic	Dept. 59%-SOEP		Dept. 60%+SOEP	
	Mean	SD	Mean	SD
Land or facilities are available for SOE	3.98	.90	3.95	.76
Supports agriculture education	4.50	.51	4.45	.61
Knowledge about SOEP	4.54	.67	3.95	1.05
Interested in students becoming involved in agriculture/agribusiness	4.46	.58	4.30	.65
Previous FFA membership or association	3.77	1.03	3.50	.88
Capable of providing financial assistance	3.42	.76	3.40	.82
Have time to assist students with SOEP	4.04	.82	3.85	.67
Actively involved in vo-ag program	4.23	.76	3.60	.88
Involved in community activities	3.46	.99	3.55	.82
Previous vo-ag experience	3.50	.95	3.35	.81
Support school activities	3.65	1.06	3.95	.76
Support of both parents	4.31	.74	4.25	.55

Note: 5 = very important; 1 = not important

All parent/guardian or employer characteristics were felt to be important by both groups, even the lowest ranking factor was deemed to

be somewhat important: capable of providing financial assistance (3.35).

Data presented in Table 7 show the mean of all characteristics of each of the four factors used in the study: 1) teacher, 2) community, 3) local program, and 4) parent/guardian or employer. Teacher characteristics (3.92) were given the highest mean score by the plus-sixty group, but also was the only score higher than those in the less than sixty group. Long (1982) identified the most discriminant power to distinguish between those programs with high percentage of SOE and those programs with low percentage SOE was teacher experience. Results in Table 7 support the author's findings.

The lowest mean for both groups was community characteristics (3.59), by the sixty percent-plus group and the highest mean was parent/guardian or employer characteristics (3.98), by the less than sixty percent group.

Table 7. Responses for teacher, community, local program, and parent/guardian or employer characteristics for two groups: those with less than 60 percent SOE and those with 60 percent or more SOE.

Characteristic	Dept. 59%-SOEP		Dept. 60%+SOEP	
	Mean	SD	Mean	SD
Teacher characteristics	3.83	.57	3.92	.44
Community characteristics	3.76	.47	3.59	.44
Local program characteristics	3.91	.48	3.84	.61
Parent/guardian or employer characteristics	3.98	.40	3.84	.55

Note: 5 = very important; 1 = not important

SOEP Comparisons by Teacher Tenure

The amount of teaching experience is divided into two categories in Table 8: those having taught for five or less years and those that have taught more than five years. Twelve teachers in the less than sixty percent group and eight in the plus sixty percent group have taught five or less years. The mean years of experience is 2.0 and 3.5, respectively. Teachers in these groups have spent 1.6 and 2.8 years in their present school system and teach in schools which average 180 and 81.4 students. While department enrollment figures are very close, 32.1 and 26.1, the percentage of FFA membership ranges from 63.2 to 84.6, respectively.

Table 8. Teacher comparisons for the following groups: teaching experience, size of school, size of vo-ag program, and percent of FFA membership.

Groups	TEACHING EXPERIENCE					
	Departments 59%-SOEP			Departments 60%+SOEP		
	No	< 5 yrs	> 5 yrs	No	< 5 yrs	> 5 yrs
Teacher experience	26	12	14	20	8	12
Percentage each group	26	46%	54%	20	40%	60%
Mean years experience	26	2	12.1	20	3.5	12.8
Mean years present system	26	1.6	8.3	20	2.8	10.3
School size	25	180	326*	20	81.4	171
Size vo-ag program	25	32.1	47.7*	20	26.1	41.8
Percent FFA membership	25	63.2	74.8*	20	84.6	75.1

* Note: Total school size, program size, and FFA membership reflect reduced number of responses because of duplication from a two-person department.

There were fourteen experienced teachers in the less than sixty percent group and twelve experienced teachers in the plus sixty percent group. The years of experience were very similar, 12.1 and 12.8, but there was two years difference in the time spent in the present system, 8.3 and 10.3 years. The less than sixty group of experienced teachers are in schools almost twice the size of the plus sixty group (326, 171), but have essentially the same department size (47.7, 41.8) and FFA membership (74.8, 75.1). The number of respondents for the less than sixty experienced group was reduced by one for school size, FFA membership, and size of vo-ag program because of the two-person department that responded to the questionnaire. While four two-person departments exist in the state, only one was represented in the survey.

The data presented in Table 9 show how teacher tenure is associated with feelings toward different teacher characteristics and SOEP participation. The two groups, less than sixty percent SOEP and plus sixty percent SOEP, were divided into two more groups, those teachers with five or less years and more than five years teaching experience.

Difference in the range of responses between less than sixty percent SOEP and sixty-plus percent SOEP were particularly noted in: relates well with students (4.33, 3.93; 4.38, 4.50).

The two groups of teachers with less than five years experience rated three of the characteristics higher than did the teachers with over five years experience: 1) makes efficient use of time (4.33, 4.13; 3.93, 3.83), 2) desire to help student achieve FFA recognition (4.17, 4.13; 3.86, 3.92), and 3) teacher involved in the community (4.50, 4.13; 3.29, 3.83). The plus-sixty SOEP group with teachers having over five

Table 9. Teacher tenure comparison with teacher characteristics in achieving a high percentage of students with supervised occupational experience programs

Characteristics	TEACHER TENURE			
	Depts. 59%-SOEP		Depts. 60%+SOEP	
	<5 yrs	>5 yrs	<5 yrs	>5 yrs
Relates well with students	4.33	3.93	4.38	4.50
Wide variety on-job experiences	3.67	3.79	3.75	3.25
Commitment to SOEP	4.25	4.57	4.75	4.75
Professionally involved in MVATA	2.75	3.14	2.63	3.83
Knowledgeable in agriculture subject areas	4.50	3.86	3.38	3.92
Makes efficient use of time	4.33	3.93	4.13	3.83
Enjoys working with individual students and parents	4.67	4.29	4.50	4.50
Had vo-ag and FFA experience when in high school	3.42	3.43	4.13	3.42
Searches for innovative types of SOEP's	3.75	3.50	3.50	3.58
Time to communicate with students and parents	4.50	4.43	4.38	4.17
Desire to help student achieve FFA recognition	4.17	3.86	4.13	3.92
Committed to vo-ag program	4.50	4.00	4.63	4.33
Participates in technical and professional workshops and conferences	3.75	3.21	2.88	3.75
Teacher is involved in community	4.50	3.29	4.13	3.83
Ability to organize SOE supervision	4.42	4.21	4.00	4.17
Success of SOE experience prior to entering teaching	3.17	3.00	3.13	3.33

Note: 5 = very important; 1 = not important

years experience considered professionally involved in MVATA to be more important than did the other groups (3.83) compared to (2.63, 3.14, 2.75). The researcher wonders if this older group contained more past MVATA officers than did the other groups.

The highest characteristic in all four groups was commitment to SOEP (4.25, 4.57, 4.75, 4.75) and the lowest characteristic of the groups was professionally involved in MVATA (2.75, 3.14, 2.63, 3.83). All factors other than MVATA involvement were considered to be at least somewhat important in achieving a high percentage of students with SOEP.

Data relating to community characteristics ranked by the four groups are found in Table 10. The four groups of respondents are: 1) less than sixty percent SOEP and five or less years teaching, 2) less than sixty percent SOEP and more than five years teaching, 3) sixty percent plus SOEP and less than five years teaching, and 4) sixty percent plus SOEP and more than five years teaching.

The plus-sixty SOEP group with less than five years experience rated community characteristics in general considerably lower than the other three groups. This group gave the lowest score in eight of the twelve categories. They were almost one full point lower than the high rating for: 1) progressive school system (3.00, 3.93), 2) unemployment conditions (2.75, 3.93), 3) former vo-ag members are still in community (3.13, 4.00), and 4) stable community populations (3.00, 3.92).

The highest rating by all groups was: understanding the FFA and SOE program (4.58, 4.29, 4.38, 4.67) and the lowest rating was community size (large versus small) (2.33, 2.57, 2.75, 2.67). The responses for teacher experience versus community characteristics were very tightly

grouped and little variation was seen in the data. All the factors seemingly were important as indicated by the fact that all the characteristics except community size received above 3.00 ratings.

Table 10. Teacher tenure comparison with community characteristics in achieving a high percentage of students with supervised occupational experience programs

Characteristics	TEACHER TENURE			
	Depts. 59%-SOEP		Depts. 60%+SOEP	
	≤5 yrs	>5 yrs	≤5 yrs	>5 yrs
Progressive school system	3.75	3.93	3.00	3.67
Unemployment conditions	3.67	3.93	2.75	3.50
Former vo-ag members are still in community	3.92	4.00	3.13	3.50
Basic community economy is agriculture/agribusiness	4.25	3.93	3.75	4.00
Community service area is agriculture related	4.25	3.57	3.50	3.83
Understanding the FFA and SOE program	4.58	4.29	4.38	4.67
Expanding, forward-looking community	3.67	3.64	3.25	3.75
Community strongly supports agriculture	4.50	4.07	4.13	4.08
Size of community (large versus small)	2.33	2.57	2.75	2.67
Majority of students live on farms/ranches	3.25	3.64	3.38	3.83
Publicity available through local media	3.83	3.57	3.25	3.75
Stable community populations	3.92	3.36	3.00	3.75

Note: 5 = very important; 1 = not important

Table 11 contains local program characteristics and their importance as perceived by teachers that fall into four groups: 1) less than sixty percent SOEP and five years or less teaching experience, 2) less than sixty percent SOEP and more than five years experience, 3) sixty percent or more SOEP and five years or less experience, and 4) sixty percent or more SOEP and more than five years experience.

All groups selected extended contract for on-site visitations (4.75, 4.79, 4.75, 4.83) as the most important factor associated with student participation in SOEP. Other factors identified as important by all groups were: 1) school administrative support of SOEP (4.42, 4.43, 4.00, 4.25), 2) instruction on SOEP is given in classroom (4.33, 4.43, 4.38, 4.50), and 3) recognition through proficiency and achievement awards (4.42, 4.07, 4.00, 4.17).

Vaughn (1982) identified number of visits conducted by teachers and amount of instruction the student received on SOEP to be important in determining whether or not students conducted SOEP's. Data presented in Table 11 agree with Vaughn's statement.

Supervised occupational experience as part of the vo-ag grade (4.00, 4.42), supervised occupational experience required of all students (4.00, 4.58), and supervised occupational experience for all FFA members (4.13, 4.58) was more important to the teachers with the higher percent of students involved in SOEP than to the group with fewer students in SOEP (3.54, 3.93; 3.92, 3.93; 4.08, 3.64, respectively). Leising (1983) concluded the major factors associated with programs with a high percent SOEP included: SOEP required by program and portion of grade from SOEP. Data in Table 11 supports Leising's findings.

Table 11. Teacher tenure comparison with local program characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	TEACHER TENURE			
	Depts. 59%-SOEP		Depts. 60%+SOEP	
	≤5 yrs	>5 yrs	≤5 yrs	>5 yrs
Extended contract for on-site instruction	4.75	4.79	4.75	4.83
School administrative support of SOEP	4.42	4.43	4.00	4.25
SOEP is part of the vo-ag grade	3.54	3.93	4.00	4.42
Active FFA Alumni Association	3.42	2.79	2.38	3.08
SOEP required of all FFA members	4.08	3.64	4.13	4.58
High school credit given for SOE	3.42	3.29	3.38	3.67
Class prerequisites required for advancement in vo-ag program	3.17	3.50	2.88	3.08
Written goals and objectives for SOEP	4.00	3.03	3.38	3.92
Instruction on SOEP is given in the classroom	4.33	4.43	4.38	4.50
Success of previous students in FFA and SOEP	4.33	4.36	4.25	3.92
Recognition through proficiency and achievement awards	4.42	4.07	4.00	4.17
Curriculum based on community needs	4.58	4.07	3.25	3.92
Student required to set SOE goals	4.38	3.71	3.88	4.33
Other vocational mechanical courses offered in school	3.17	2.93	2.00	2.92
SOE required of all students	3.92	3.93	4.00	4.58
Active program advisory council	4.00	3.93	3.13	3.92

Note: 5 = very important; 1 = not important

Lowest ratings given by all four groups were: 1) active FFA Alumni Association (3.42, 2.79, 2.38, 3.08), 2) other vocational mechanical courses offered (3.17, 2.93, 2.00, 2.92), and 3) class prerequisites required for advancement in the program (3.17, 3.50, 2.88, 3.08).

Table 12. Teacher tenure comparison with parent/guardian or employer characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	TEACHER TENURE			
	Depts. 59%-SOEP		Depts. 60%+SOEP	
	≤5 yrs	>5 yrs	≤5 yrs	>5 yrs
Land or facilities are available for SOE	4.04	3.93	3.75	4.08
Supports agriculture education	4.67	4.36	4.50	4.42
Knowledgeable about SOEP	4.67	4.43	3.75	4.08
Interested in students becoming involved in agriculture/agribusiness	4.33	4.57	4.13	4.42
Previous FFA membership or association	3.75	3.79	3.63	3.42
Capable of providing financial assistance	3.42	3.43	3.00	3.67
Have time to assist students with SOEP	4.00	4.07	3.50	4.08
Actively involved in vo-ag program	4.33	4.14	3.25	3.83
Involved in community activities	4.00	3.00	3.50	3.58
Previous vo-ag experience	3.50	3.50	3.38	3.33
Support school activities	3.92	3.43	4.00	3.92
Support of both parents	4.25	4.36	4.25	4.25

Note: 5 = very important; 1 = not important

The information presented in Table 12 indicates that all four groups of teachers felt the following parent/guardian or employer characteristics were very important in conducting high percentage SOEP programs: 1) supports agriculture education (4.67, 4.36, 4.50, 4.42), 2) interested in students becoming involved in agriculture/agribusiness (4.33, 4.57, 4.13, 4.42), and 3) support of both parents (4.25, 4.36, 4.25, 4.25). There was difference between teachers less than five years on two characteristics. Those with less than sixty percent SOEP felt stronger about the importance of the following: 1) knowledgeable about SOEP (4.67, 3.75) and actively involved in vo-ag program (4.33, 3.25).

SOEP Comparisons by School Size

School size was divided into two categories in Table 13: those with one-hundred or less students and those with over one-hundred students. The categories were further divided by SOEP participation. Nine teachers were in each group of schools with one-hundred or less students; seventeen teachers in the less than sixty percent SOEP group and eleven teachers in the plus sixty percent SOEP group were in schools with over one-hundred students. Teacher experience was very close in both groups (6.3, 6.9; 8.1, 10.9). Years in the present system for less than sixty SOEP and 100 or less students was less than the other three groups (3.6 compared to 6.1, 6.6, and 7.8). School size for the less than one-hundred students groups were very close (51.8, 48.2), but the plus one-hundred students was much higher for the less than sixty percent SOEP group than for the plus sixty percent SOEP group (431.7, 206.0). The size of the vo-ag program was similar in all three groups

(27.8, 23.9, 30.8), but was almost twice as large for the less than sixty percent SOEP and plus one-hundred student group as for the other three groups (51.5). FFA membership was the highest in the plus sixty percent SOEP and less than one-hundred student group (93.3 percent).

Table 13. School size comparisons for the following groups: teaching experience, size of school, size of vo-ag program, and percent of FFA membership.

Group	SIZE OF SCHOOL					
	Depts. 59%-SOEP			Depts. 60%+SOEP		
	No	<100	≥100	No	<100	≥100
Number of schools	26	9	17	20	9	11
Percentage each group	26	34.6	65.4	20	45.0	55.0
Mean years experience	26	6.3	8.1	20	6.9	10.9
Mean years present system	26	3.6	6.1	20	6.6	7.8
School size	25	51.8	431.7*	20	48.2	206.0
Size vo-ag program	25	27.8	51.5*	20	23.9	30.8
Percent FFA membership	25	68.3	74.3*	20	93.3	70.4

* Note: Total school size, program size, and FFA membership reflects reduced number of responses because of duplication from a two-person department.

Teachers' responses by size of school were in agreement that: relates well with students (4.22, 4.06, 4.56, 4.36), commitment to SOEP (4.22, 4.53, 4.67, 4.82), enjoys working with individual students and parents (4.22, 4.59, 4.44, 4.55), time to communicate with students and parents (4.44, 4.47, 4.33, 4.18), committed to vo-ag program (4.33, 4.18, 4.44, 4.45), and ability to organize SOE supervision (4.33, 4.29, 4.00, 4.18) were very important. This information is noted in Table 14.

Table 14. School size comparison with teacher characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	SCHOOL SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	<100	≥100	<100	≥100
Relates well with students	4.22	4.06	4.56	4.36
Wide variety of on-job experiences	3.78	3.71	3.67	3.27
Commitment to SOEP	4.22	4.53	4.67	4.82
Professionally involved in MVATA	2.67	3.12	3.00	3.64
Knowledgeable in agriculture subject areas	4.33	4.06	3.89	3.55
Makes efficient use of time	3.89	4.24	4.00	3.91
Enjoys working with individual students and parents	4.22	4.59	4.44	4.55
Had vo-ag and FFA experience when in high school	3.67	3.29	3.78	3.64
Searches for innovative types of SOEP's	3.44	3.71	3.67	3.45
Time to communicate with students and parents	4.44	4.47	4.33	4.18
Desire to help student achieve FFA recognition	3.78	4.12	4.22	3.82
Committed to vo-ag program	4.33	4.18	4.44	4.45
Participates in technical and professional workshops and conferences	3.56	3.41	3.33	3.45
Teacher is involved in the community	4.11	3.71	4.22	3.73
Ability to organize SOE supervision	4.33	4.29	4.00	4.18
Success of SOE experience prior to entering teaching	3.11	3.06	3.33	3.18

Note: 5 = very important; 1 = not important

Teachers in the less than sixty percent SOEP group rated knowledgeable in agriculture subject areas (4.33, 4.06) as more important than did the plus sixty SOEP group (3.89, 3.55). Teachers in schools with one-hundred or less students felt that it was more important for the teacher to be involved in the community (4.11, 4.22) than did teachers in schools with over one-hundred students (3.71, 3.73). All groups except the plus-sixty/plus-one-hundred students group rated professionally involved in MVATA (2.67, 3.12, 3.00 as compared to 3.64) as less important. Again, this might reflect more past officers of the MVATA in this particular group.

The data in Table 15 report the mean teacher perceptions of community characteristics assigned by teachers to the school size and percent of student supervised occupational experience programs.

The lowest mean perception rating was from the plus sixty SOEP and less than one-hundred sized school groups. Their mean ratings were the lowest on six of the twelve characteristics. The most important mean ratings were given to understanding FFA and SOE program (4.67, 4.29, 4.33, 4.73) and community strongly supports agriculture (4.11, 4.35, 4.22, 4.00). The size community was perceived to be the least important community characteristic (2.22, 2.59, 2.56, 2.82).

Local program characteristics deemed important for all schools regardless of size are presented in Table 16. They include extended contract for on-site instruction (4.89, 4.71, 4.78, 4.82), school administrative support of SOEP (4.44, 4.41, 4.33, 4.00), instruction on SOEP is given in the classroom (4.22, 4.47, 4.33, 4.55), and recognition through proficiency and achievement awards (4.11, 4.29, 4.11, 4.09).

Table 15. School size comparison with community characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	SCHOOL SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	<100	≥100	<100	≥100
Progressive school system	4.00	3.76	3.33	3.45
Unemployment conditions	3.89	3.76	2.78	3.55
Former vo-ag members are still in community	3.78	4.06	3.22	3.45
Basic community economy is agriculture/agribusiness	4.22	4.00	3.78	4.00
Community service area is agriculture related	4.00	3.82	3.44	3.91
Understanding the FFA and SOE program	4.67	4.29	4.33	4.73
Expanding, forward-looking community	3.89	3.53	3.56	3.55
Community strongly supports agriculture	4.11	4.35	4.22	4.00
Size of community (large versus small)	2.22	2.59	2.56	2.82
Majority of students live on farms/ranches	3.33	3.53	3.67	3.64
Publicity available through local media	3.67	3.71	3.56	3.55
Stable community populations	3.56	3.65	3.22	3.64

Note: 5 = very important; 1 = not important

Again, as was shown in Table 11, teachers with higher percent of SOEP rated supervised occupational experience required for all vo-ag students (4.00, 4.64) and supervised occupational experience programs required of FFA members (4.11, 4.64) higher than did the less than sixty SOEP group (3.89, 3.94 compared to 3.56, 4.00). Teachers in the less than sixty SOEP and less than one-hundred students rated SOE required of all

Table 16. School size comparison with local program characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	SCHOOL SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	<100	≥100	<100	≥100
Extended contract for on-site instruction	4.89	4.71	4.78	4.82
School administrative support of SOEP	4.44	4.41	4.33	4.00
SOEP is a part of the vo-ag grade	3.11	4.09	3.89	4.55
Active FFA Alumni Association	2.56	3.35	2.67	2.91
SOEP required of all FFA members	3.56	4.00	4.11	4.64
High school credit given for SOE	3.00	3.53	3.33	3.73
Class prerequisites required for advancement in vo-ag program	3.56	3.24	2.81	3.09
Written goals and objectives for SOEP	4.11	3.88	3.67	3.73
Instruction on SOEP is given in the classroom	4.22	4.47	4.33	4.55
Success of previous students in FFA and SOEP	4.44	4.29	4.33	3.82
Recognition through proficiency and achievement awards	4.11	4.29	4.11	4.09
Curriculum based on community needs	4.56	4.18	3.56	3.73
Student required to set SOE goals	4.33	3.85	3.89	4.36
Other vocational mechanical courses offered in school	3.00	3.06	2.22	2.82
SOE required of all students	3.89	3.94	4.00	4.64
Active program advisory council	3.89	3.88	3.44	3.73

Note: 5 = very important; 1 = not important

students considerably lower than did the other three groups (3.56 compared to 4.00, 4.11, 4.64).

Written goals and objectives were higher in the less than sixty SOEP and five or less years experience than the other three groups (4.11 compared to 3.88, 3.67, 3.73). Other differences between groups was in success of previous students in FFA and SOEP, where the plus sixty SOEP and plus five years experience group felt that success was much less important (3.82 compared to 4.44, 4.29, 4.11). Active FFA Alumni Association (2.56, 3.35, 2.67, 2.91) and other mechanical courses offered in school (3.00, 3.06, 2.22, 2.82) were considered the least important to teachers.

The data in Table 17 show that three parent/guardian or employer characteristics were important regardless of school size. As indicated: 1) supports agriculture education (4.67, 4.41, 4.56, 4.36), 2) interested in students becoming involved in agriculture (4.33, 4.53, 4.44, 4.18), and 3) support of both parents (4.67, 4.12, 4.11, 4.36) had the highest mean rating. No characteristics were felt to be unimportant by the four groups.

Less than sixty percent SOEP groups rated knowledgeable about SOEP (4.44, 4.59) and actively involved in vo-ag program (4.11, 4.29) as more important than did those with sixty plus SOEP's (4.00, 3.91 and 3.56, 3.64, respectively).

Respondents from larger schools felt that land or facilities are available for SOEP (4.06, 4.09) was more important than did the respondents from smaller schools (3.83, 3.78), while smaller school

Table 17. School size comparison with parent/guardian or employer characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	SCHOOL SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	<100	≥100	<100	≥100
Land or facilities are available for SOE	3.83	4.06	3.78	4.09
Supports agriculture education	4.67	4.41	4.56	4.36
Knowledgeable about SOEP	4.44	4.59	4.00	3.91
Interested in students becoming involved in Agriculture/agribusiness	4.33	4.53	4.44	4.18
Previous FFA membership or association	4.00	3.65	3.78	3.27
Capable of providing financial assistance	3.67	3.29	3.22	3.55
Have time to assist students with SOEP	4.22	3.94	3.67	4.00
Actively involved in vo-ag program	4.11	4.29	3.56	3.64
Involved in community activities	3.67	3.35	3.67	3.45
Previous vo-ag experience	3.78	3.35	3.44	3.27
Support school activities	4.33	3.29	4.22	3.73
Support of both parents	4.67	4.12	4.11	4.36

Note: 5 = very important; 1 = not important

respondents deemed support of school activities (4.33, 4.22) more important than did the larger school respondents (3.29, 3.73).

The major disagreement between groups was over previous FFA membership or association. The plus sixty SOEP and plus one-hundred student group felt that previous experience with FFA was less important than did the other three groups (3.27 compared to 4.00, 3.65, 3.78).

SOEP Comparisons by Program Size

Program size was broken into four groups and reported in Table 18: 1) less than sixty percent SOEP and less than forty students, 2) less than sixty percent SOEP and forty or more students, 3) sixty percent or more SOEP and less than forty students, and 4) sixty percent or more SOEP and forty or more students. The number of responses for less than sixty percent SOEP was twenty-six and plus sixty percent SOEP was twenty.

Fifteen of the less than sixty percent SOEP group taught in schools with less than forty students in the program, and thirteen of the plus sixty percent SOEP group were in programs with less than forty students. Teachers in the less than forty department size had less teaching experience (4.7, 7.1) and less years in their present systems (2.9, 6.3). Teachers in the larger departments had a similar number of years of experience (11.2, 12.9) and tenure (8.4, 9.0).

The school size was almost twice as large for the programs with less than sixty percent SOEP. Programs with less than forty students were from school sizes of 153.7 and 82.2. Programs with more than forty students had school enrollment of 410.0 and 233.0. The number of programs for the less than sixty percent SOEP and plus forty students was reduced by one because of the two-person program identified in the respondents. The program size was about the same in both groups: less than sixty percent SOEP (28.9, 27.5) and plus sixty percent SOEP (58.0, 50.6). FFA membership was about equal in three of the groups, with only the plus sixty percent SOEP and less than forty students considerably higher (85.8 compared to 73.5, 66.8, 69.7).

Table 18. Vo-ag program size comparisons for the following groups: teaching experience, size of school, size of vo-ag program, and percent of FFA membership.

Groups	SIZE OF VO-AG PROGRAM					
	Departments < 59% SOEP			Departments > 60% SOEP		
	No	< 40	≥ 40	No	< 40	≥ 40
Number of programs	26	15	11	20	13	7
Percent each group	26	57.8	42.2	20	65.0	35.0
Mean years of experience	26	4.7	11.2	20	7.1	12.9
Mean years present system	26	2.9	8.4	20	6.3	9.0
Mean school size	25	153.7	410.0*	20	82.2	233.0
Mean size of vo-ag program	25	28.9	58.0*	20	27.5	50.6
Mean percent FFA membership	25	73.5	66.8*	20	85.8	69.7

* Note: Total school size, program size, and FFA membership reflect reduced number of responses because of duplication from a two-person department.

Data relating to teacher characteristics compared to department size is found in Table 19. All teachers regardless of their department size felt the following characteristics were most important in achieving a high percentage of students with SOEP: 1) relates well with students (4.20, 4.00, 4.46, 4.43), 2) commitment to SOEP (4.53, 4.27, 4.77, 4.71), 3) enjoys working with individual students and parents (4.47, 4.45, 4.46, 4.47), and 4) time to communicate with students and parents (4.47, 4.45, 4.31, 4.14). Three of the groups felt that being committed to vo-ag program was important, but among the less than sixty percent SOEP group and the plus forty students group it was rated slightly less important (3.91 compared to 4.47, 4.54, 4.29).

Table 19. Vo-ag program size comparison with teacher characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	VO-AG PROGRAM SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 40	≥ 40	< 40	≥ 40
Relates well with students	4.20	4.00	4.46	4.43
Wide variety of on-job experiences	3.73	3.73	3.54	3.29
Commitment to SOEP	4.53	4.27	4.77	4.71
Professionally involved in MVATA	2.87	3.09	3.00	4.00
Knowledgeable in agriculture subject areas	4.33	3.91	3.54	4.00
Makes efficient use of time	4.20	4.00	3.92	4.00
Enjoys working with individual students and parents	4.47	4.45	4.46	4.57
Had vo-ag and FFA experience in high school	3.33	3.55	3.62	3.86
Searches for innovative types of SOEP's	3.67	3.55	3.62	3.43
Time to communicate with students and parents	4.47	4.45	4.31	4.14
Desire to help student achieve FFA recognition	3.87	4.18	4.23	3.57
Committed to vo-ag program	4.47	3.91	4.54	4.29
Participates in technical and professional workshops and conferences	3.53	3.36	3.23	3.71
Teacher is involved in the community	4.07	3.55	4.15	3.57
Ability to organize SOE supervision	4.33	4.27	4.00	4.29
Success of SOE experience prior to entering teaching	3.20	2.91	3.23	3.29

Note: 5 = very important; 1 = not important

The knowledge about agriculture subject areas, found in Table 19, was considerably more important to the teachers with less than sixty percent SOEP and less than forty students than their counterparts in the plus sixty percent group (4.33, 3.54). MVATA involvement was rated higher for the plus sixty SOEP and plus forty students than any other group in the study (4.00).

Table 20. Vo-ag program size comparison with community characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	VO-AG PROGRAM SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 40	≥ 40	< 40	≥ 40
Progressive school system	3.80	3.91	3.23	3.71
Unemployment conditions	3.93	3.64	3.00	3.57
Former vo-ag members are still in community	3.93	4.00	3.31	3.43
Basic community economy is agriculture/agribusiness	4.13	4.00	3.77	4.14
Community service area is agriculture related	3.87	3.91	3.62	3.86
Understanding the FFA and SOE program	4.53	4.27	4.46	4.71
Expanding, forward-looking community	3.73	3.55	3.54	3.57
Community strongly supports agriculture	4.20	4.36	4.15	4.00
Size of community (large versus small)	2.60	2.27	2.69	2.71
Majority of students live on farms/ranches	3.27	3.73	3.46	4.00
Publicity available through local media	3.80	3.55	3.46	3.71
Stable community populations	3.80	3.36	3.08	4.14

Note: 5 = very important; 1 = not important

Data in Table 20 reveal how vocational agriculture teachers feel about community characteristics depending on size of their program. Teachers in all groups felt that understanding the FFA and SOE program (4.53, 4.27, 4.46, 4.71) and community service area is agriculture related (4.20, 4.36, 4.15, 4.00) are more important and associated with students having a high percentage of supervised occupational experience programs. All groups felt that size of community had little to do with success of having a SOEP (2.60, 2.27, 2.69, 2.71).

Teachers in the plus sixty percent SOEP and less than forty students group rated the community characteristics lower than the other three groups seven out of twelve times. This group is thought to be similar in population to low responses identified in Table 15.

A noticeable difference was seen in the plus sixty percent SOEP group on stable community populations (3.08, 4.14).

An examination of the data in Table 21 show that: 1) extended contract for on-site instruction (4.73, 4.82, 4.77, 4.86), 2) school administrative support of SOEP (4.67, 4.09, 4.08, 4.29), and 3) instruction on SOEP is given in the classroom (4.33, 4.45, 4.54, 4.29) were perceived as the most important local program characteristics in achieving a high percentage of students with supervised occupational experience programs. This is consistent with data in Tables 11 and 16, with the exception that data in Tables 11 and 16 indicated that recognition through proficiency and achievement awards was more important. Data in Table 21 indicate that teachers with plus sixty percent SOEP and plus forty students rated the importance slightly lower than had the previous two tables (3.86 compared to 4.17, 4.09).

Table 21. Vo-ag program size comparison with local program characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	VO-AG PROGRAM SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 40	≥ 40	< 40	≥ 40
Extended contract for on-site instruction	4.73	4.82	4.77	4.86
School administrative support of SOEP	4.67	4.09	4.08	4.29
SOEP is a part of the vo-ag grade	3.53	4.05	4.15	4.43
Active FFA Alumni Association	3.13	3.00	2.69	3.00
SOEP required of all FFA members	3.93	3.73	4.31	4.57
High school credit given for SOE	3.47	3.18	3.54	3.57
Class prerequisites required for advancement in vo-ag program	3.27	3.45	3.15	2.71
Written goals and objectives for SOEP	4.13	3.73	3.77	3.57
Instruction on SOEP is given in classroom	4.33	4.45	4.54	4.29
Success of previous students in FFA and SOEP	4.40	4.27	4.31	3.57
Recognition through proficiency and achievement awards	4.40	4.00	4.23	3.86
Curriculum based on community needs	4.47	4.09	3.62	3.71
Student required to set SOE goals	4.37	3.55	4.15	4.14
Other vocational mechanical courses offered in school	2.80	3.36	2.54	2.57
SOE required of all students	4.13	3.64	4.23	4.57
Active program advisory council	3.93	3.82	3.46	3.86

Note: 5 = very important; 1 = not important

Teachers in the plus sixty percent SOEP group again recognized supervised occupational experience programs required of FFA members

(4.15, 4.43) as being more important than did the group with less than sixty percent SOEP (3.93, 3.73). Teachers in the less than sixty SOEP and less than forty students group felt that: 1) written goals for SOEP (4.13), 2) school administrative support of SOEP (4.67), 3) curriculum based on community needs (4.47), and 4) students required to set SOE goals (4.37) were more important than did the teachers in the other three groups (3.73, 3.77, 3.57), (4.09, 4.08, 4.29), (4.09, 3.62, 3.71), and (3.55, 4.15, 4.14), respectively. Active FFA Alumni Association (3.13, 3.00, 2.69, 3.00) and other vocational mechanical courses offered in school (2.80, 3.36, 2.54, 2.57) again had the least importance of local program characteristics.

The data in Table 22 represent differences of opinion of teachers for the following groups: 1) less than sixty percent SOEP and less than forty students, 2) less than sixty percent SOEP and forty or more students, 3) sixty or more percent SOEP and less than forty students, and sixty or more percent SOEP and forty or more students.

All the groups felt that the parent/guardian or employer characteristics of: 1) supporting agriculture education (4.67, 4.27, 4.54, 4.29), 2) interest in students becoming involved in agriculture/agribusiness (4.33, 4.64, 4.31, 4.29), 3) support by both parents (4.40, 4.18, 4.23, 4.29), were most important. The less than sixty percent SOEP group identified actively involved in vo-ag program (4.13, 4.36; 3.62, 3.57) and knowledgeable about SOEP (4.53, 4.55; 3.92, 4.00) as more important than did the over sixty percent SOEP group.

Teachers in programs over forty students rated have time to assist students with SOEP (4.18, 4.14) more important than did those teachers

in small programs (3.93, 3.69). No characteristic was deemed to be unimportant (mean response less than 3.0) in achieving a high percentage of students with supervised occupational experience programs.

Table 22. Vo-ag program size comparison with parent/guardian or employer characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	VO-AG PROGRAM SIZE			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 40	≥ 40	< 40	≥ 40
Land or facilities are available for SOE	3.97	4.00	3.92	4.00
Supports agriculture education	4.67	4.27	4.54	4.29
Knowledgeable about SOEP	4.53	4.55	3.92	4.00
Interested in students becoming involved in agriculture/agribusiness	4.33	4.64	4.31	4.29
Previous FFA membership or association	3.67	3.91	3.62	3.29
Capable of providing financial assistance	3.40	3.45	3.31	3.57
Have time to assist students with SOEP	3.93	4.18	3.69	4.14
Actively involved in vo-ag program	4.13	4.36	3.62	3.57
Involved in community activities	3.60	3.27	3.62	3.43
Previous vo-ag experience	3.33	3.73	3.38	3.29
Support school activities	3.80	3.45	4.08	3.71
Support of both parents	4.40	4.18	4.23	4.29

Note: 5 = very important; 1 = not important

SOEP Comparisons by FFA Membership

The percent of FFA membership in the two groups less than sixty percent SOEP and sixty percent or more SOEP is recorded for: 1) years

teaching experience, 2) years in the present system, 3) school size, 4) program size, and 5) percent FFA membership, is recorded in Table 23. The number of schools in the groups are twenty-six for the less than sixty percent SOEP and twenty for the plus sixty percent SOEP.

Table 23. FFA membership percent comparisons for the following groups: teaching experience, size of school, size of vo-ag program, and percent of FFA membership.

Groups	PERCENT FFA MEMBERSHIP					
	Departments 59%-SOEP			Departments 60%+SOEP		
	No	< 75	≥ 75	No	< 75	≥ 75
Number FFA membership	26	13	13	20	7	13
Percent each group	26	50.0	50.0	20	35.0	65.0
Mean years of experience	26	7.1	7.9	20	9.6	8.9
Mean years present system	26	4.1	6.3	20	7.4	7.2
Mean school size	25	204.8	312.0*	20	160.8	121.1
Mean size of vo-ag program	25	39.8	40.8*	20	44.0	31.0
Mean percent FFA membership	25	48.9	95.8*	20	61.4	92.8

* Note: Total school size, program size, and FFA membership reflect reduced number of responses because of duplication from a two-person department.

Half of the teachers (13) in the less than sixty SOEP group has FFA membership of more than seventy-five percent and thirteen of the plus sixty SOEP group had membership of seventy-five percent. The years teaching experience for the four groups are similar (7.1, 7.9, 9.6, 8.9), but years tenure in the present system is slightly higher for those teachers in the plus sixty SOEP group (4.1, 6.3; 7.4, 7.2, respectively).

School size is larger in the less than sixty percent SOEP (204.8, 312.0) than the plus sixty percent SOEP group (160.0, 121.1). Data indicate that teachers in larger programs in the less than sixty percent SOEP group and teachers in smaller programs in the sixty plus percent SOEP group have higher percentage of FFA membership (95.8 percent, 92.8 percent). FFA membership in the less than sixty percent SOEP and less than seventy-five percent membership group was 48.9 percent and in the plus sixty percent SOEP and less than seventy-five percent membership group, membership was 95.8 percent.

An examination of the data in Table 24 reveals the perceptions of the teacher characteristics in achieving a high percentage of students with supervised occupational experience programs. All respondents felt that the following areas were most important: 1) relates well with students (4.08, 4.15, 4.29, 4.54), 2) commitment to SOEP (4.15, 4.69, 4.71, 4.77), 3) enjoys working with individual students and parents (4.31, 4.62, 4.43, 4.54), 4) time to communicate with students (4.46, 4.46, 4.14, 4.31), 5) committed to vo-ag program (4.00, 4.46, 4.43, 4.46), and 5) ability to organize SOE supervision (4.15, 4.46, 4.00, 4.15).

Teachers with seventy-five percent or over membership in the FFA rated: 1) makes efficient use of time (4.54, 4.08), and 2) desire to help student achieve FFA recognition (4.23, 4.15) higher than did teachers with less than seventy-five percent membership (3.69, 3.71; 3.77, 3.71). The less than sixty percent SOEP and less than seventy-five percent membership group did not rate any of the characteristics with a mean less than 3.0, except professionally involved in MVATA (2.77).

Table 24. FFA membership percent comparison with teacher characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	PERCENT FFA MEMBERSHIP			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 75	≥ 75	< 75	≥ 75
Relates well with students	4.08	4.15	4.29	4.54
Wide variety of on-job experiences	3.54	3.92	3.00	3.69
Commitment to SOEP	4.15	4.69	4.71	4.77
Professionally involved in MVATA	2.77	3.15	3.43	3.31
Knowledgeable in agriculture subject areas	4.00	4.31	3.29	3.92
Makes efficient use of time	3.69	4.54	3.71	4.08
Enjoys working with individual students and parents	4.31	4.62	4.43	4.54
Had vo-ag and FFA experience when in high school	3.38	3.46	3.71	3.69
Searches for innovative types of SOEP's	3.54	3.69	3.29	3.69
Time to communicate with students and parents	4.46	4.46	4.14	4.31
Desire to help student achieve FFA recognition	3.77	4.23	3.71	4.15
Committed to vo-ag program	4.00	4.46	4.43	4.46
Participates in technical and professional workshops and conferences	3.38	3.54	3.29	3.46
Teacher is involved in the community	3.92	3.77	3.71	4.08
Ability to organize SOE supervision	4.15	4.46	4.00	4.15
Success of SOE experience prior to entering teaching	3.15	3.00	3.00	3.38

Note: 5 = very important; 1 = not important

The mean perceptions of teachers' opinions of community characteristics relating to FFA membership is portrayed in Table 25. All groups rated understanding the FFA and SOE programs (4.31, 4.54, 4.71, 4.46) and community service area is agriculture related (4.23, 4.31, 4.14, 4.08) the highest in importance of the twelve characteristics listed in the questionnaire.

Table 25. FFA membership percent comparisons with community characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	PERCENT FFA MEMBERSHIP			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 75	≥ 75	< 75	≥ 75
Progressive school system	4.00	3.69	3.29	3.46
Unemployment conditions	3.69	3.92	3.43	3.08
Former vo-ag members still in community	3.85	4.08	3.43	3.31
Basic community economy is agriculture/ agribusiness	4.15	4.00	4.00	3.85
Community service area is agriculture related	3.69	4.08	3.86	3.62
Understanding the FFA and SOE program	4.31	4.54	4.71	4.46
Expanding, forward-looking community	3.62	3.69	3.43	3.62
Community strongly supports agriculture	4.23	4.31	4.14	4.08
Size of community (large versus small)	2.69	2.23	3.00	2.54
Majority of students live on farms/ ranches	3.54	3.38	3.57	3.69
Publicity available through local media	3.54	3.85	3.57	3.54
Stable community populations	3.69	3.54	3.57	3.38

Note: 5 = very important; 1 = not important

The general consensus of the groups was that size of the community is least important with a range of responses from 3.0 to 2.23. Teachers from departments with less than sixty percent SOEP rated unemployment conditions (3.92, 3.69) and former vo-ag members are still in community (3.85, 4.08) higher than those with more than sixty percent SOEP (3.43, 3.08; 3.43, 3.31).

The data in Table 26 reveal the teachers' opinion of the local program characteristics in achieving a high percentage of students with supervised occupational experience programs. The teachers in the four groups identified: 1) extended contract for on-site instruction (4.60, 4.85, 4.71, 4.85), 2) instruction on SOEP given in the classroom (4.38, 4.38, 4.57, 4.38), and 3) recognition through proficiency and achievement awards (4.15, 4.31, 4.00, 4.15) as the most important factors in achieving a high percentage of supervised occupational experience programs.

Teachers in the plus sixty percent SOEP group felt: 1) supervised occupational experience programs required of all students (4.57, 4.23), 2) supervised occupational experience programs required of all FFA members (4.57, 4.31), and 3) supervised occupational experience program is a part of the vo-ag grade (4.43, 4.15), were more important in getting students involved with SOEP than did the less than sixty percent SOEP group; the less than sixty percent SOEP group felt: 1) school administrative support for SOEP (4.38, 4.46), 2) active FFA Alumni Association (3.08, 3.08), 3) class prerequisites required for advancement in the vo-ag program (3.23, 3.46), and 4) curriculum based on community needs

(4.15, 4.46) were more important than did the plus sixty percent SOEP group.

Table 26. FFA membership comparison with local program characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	PERCENT FFA MEMBERSHIP			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 75	≥ 75	< 75	≥ 75
Extended contract for on-site instruction	4.69	4.85	4.71	4.85
School administrative support of SOEP	4.38	4.46	3.71	4.38
SOEP is a part of the vo-ag grade	3.65	3.85	4.43	4.15
Active FFA Alumni Association	3.08	3.08	2.71	2.85
SOEP required of all FFA members	3.69	4.00	4.57	4.31
High school credit given for SOE	3.77	2.92	3.71	3.46
Class prerequisites requires for advancement in vo-ag program	3.23	3.46	3.00	3.00
Written goals and objectives for SOEP	3.85	4.08	3.71	3.69
Instruction on SOEP given in classroom	4.38	4.38	4.57	4.38
Success of previous students in FFA and SOEP	4.54	4.15	3.71	4.23
Recognition through proficiency and achievement awards	4.15	4.31	4.00	4.15
Curriculum based on community needs	4.15	4.46	3.71	3.62
Student required to set SOE goals	3.96	4.08	4.29	4.08
Other vocational mechanical courses offered in school	3.08	3.00	2.71	2.46
SOE required of all students	3.77	4.08	4.57	4.23
Active program advisory council	3.69	4.08	3.86	3.46

Note: 5 = very important; 1 = not important

Individual differences were seen in the less than sixty percent SOEP and plus seventy-five percent membership group that showed high school credit given for SOE to be considerably less important (2.92 compared to 3.77, 3.71, 3.46).

Data in Table 27 show how the different groups of vocational teachers rated the importance of parent/guardian or employer characteristics. The groups included representatives from departments over sixty

Table 27. FFA membership comparisons with parent/guardian or employer characteristics in achieving a high percentage of students with supervised occupational experience programs.

Characteristics	PERCENT FFA MEMBERSHIP			
	Departments 59%-SOEP		Departments 60%+SOEP	
	< 75	≥ 75	< 75	≥ 75
Land or facilities are available for SOE	3.81	4.15	4.00	3.92
Supports agriculture education	4.46	4.54	4.43	4.46
Knowledgeable about SOEP	4.46	4.62	3.71	4.08
Interested in students becoming involved in agriculture/agribusiness	4.46	4.46	4.14	4.38
Previous FFA membership or association	3.92	3.62	2.86	3.85
Capable of providing financial assistance	3.46	3.38	3.14	3.54
Have time to assist students with SOEP	3.77	4.31	3.71	3.92
Actively involved in vo-ag program	4.23	4.23	3.57	3.62
Involved in community activities	3.46	3.46	3.29	3.69
Previous vo-ag experience	3.77	3.23	3.29	3.38
Support school activities	3.85	3.46	3.86	4.00
Support of both parents	4.23	4.38	4.43	4.15

Note: 5 = very important; 1 = not important

percent SOEP and less than sixty percent SOEP, as well as less than seventy-five percent and over seventy-five percent FFA membership.

The three most important characteristics identified by all groups were: 1) supports agriculture education (4.46, 4.62, 3.71, 4.08), 2) interested in students becoming involved in agriculture/agribusiness (4.46, 4.46, 4.14, 4.38), and 3) support of both parents (4.23, 4.38, 4.43, 4.15). The group of teachers in programs with more than sixty percent SOEP and less than seventy-five percent FFA membership was more concerned about the importance of parent/guardian or employer characteristics than the other three groups in seven out of the twelve areas.

Responses in the less than sixty percent SOEP group identified:

1) knowledgeable about SOEP (4.46, 4.46; 3.71, 4.08), and 2) actively involved in vo-ag program (4.23, 4.23; 3.57, 3.62) as more important to student participation in supervised occupational experience than did respondents in the over sixty percent SOEP group.

SOEP Comparisons by Rank of Characteristics

The ranking of the teacher characteristics by the two groups, less than sixty percent SOEP and sixty percent or more SOEP, is reported in Table 28. The characteristics are ranked from one to sixteen according to an importance scale from five to one (five being the highest or very important).

The highest rank for the plus sixty percent SOEP group was commitment to SOEP and the highest rank for less than sixty percent SOEP was a tie between time to communicate with students and enjoys working with individual students and parents. The lowest rank for each group was

Table 28. Rank of teacher characteristics by teachers with less than sixty percent SOEP and sixty percent or more SOEP.

Characteristics	TEACHER	
	Departments 59%-SOEP	Departments 60%+SOEP
Commitment to SOEP	3	1
Makes efficient use of time	7-8	2
Relates well with students	7-8	3-4
Committed to vo-ag program	5	3-4
Time to communicate with students and parents	1-2	5
Ability to organize SOE supervision	4	6
Desire to help student achieve FFA recognition	9	7
Teacher is involved in the community	10	8-9
Enjoys working with individual students and parents	1-2	8-9
Had vo-ag and FFA experience when in high school	14	10-11
Knowledgeable in agriculture subject areas	6	10-11
Searches for innovative types of SOEP's	12	12
Wide variety of on-job experiences	11	13
Participates in technical and professional workshops and conferences	13	14
Professionally involved in MVATA	16	15
Success of SOE experience prior to entering teaching	15	16

Note: 1 = highest rank; 16 = lowest rank

split between success of SOE experience prior to entering teaching and professionally involved in MVATA. Large differences in rank were noted in two areas: 1) makes efficient use of time, and 2) enjoys working with individual students and parents. The plus sixty percent SOEP group felt that: makes efficient use of time (2) was more important than did the less than sixty percent SOEP group (7-8); the less than sixty percent group felt that: enjoys working with individual students and parents was more important (1-2) than did the plus sixty percent group (8-9).

Less differences were noted in: 1) relates well with students (7-8; 3-4), 2) knowledgeable in agriculture subject areas (6; 10-11), 3) had vo-ag and FFA experience when in high school (14; 10-11), and 4) time to communicate with students and parents (1; 5). The rest of the characteristics were within one or two places in rank.

The data in Table 29 identify the difference in rank for community characteristics for the two groups, less than sixty percent SOEP and sixty percent or more SOEP. The characteristics were ranked from one to twelve according to the mean importance rating on the questionnaire.

The highest rank (1) by both groups was understanding the FFA and SOE program. The lowest rank (12) was given to size of the community (large versus small). A large difference in rank was identified in two areas: 1) the plus sixty percent SOEP group felt that having a majority of students living on farms/ranches (5) was more important than did the less than sixty percent SOEP group (11), and 2) the less than sixty percent SOEP group deemed former vo-ag members living in the community (4) as more important than did the plus sixty percent SOEP group (10).

Table 29. Rank of community characteristics by teachers with less than sixty percent SOEP and sixty percent or more SOEP.

Characteristics	COMMUNITY	
	Departments 59%-SOEP	Departments 60%+SOEP
Understanding the FFA and SOE program	1	1
Community strongly supports agriculture	2	2
Basic community economy is agriculture/ agribusiness	3	3
Community service area is agriculture related	5	4
Majority of students live on farms/ranches	11	5
Expanding, forward-looking community	9	6-7
Publicity available through local media	8	6-7
Stable community populations	10	8
Progressive school system	6	9
Unemployment conditions	7	11
Former vo-ag members are still in community	4	10
Size of community (large versus small)	12	12

Note: 1 = highest rank; 12 = lowest rank

A minor difference was noted in the less than sixty percent SOEP group which felt that unemployment conditions in the community (7) were more important than did the plus sixty percent SOEP group (11), who felt that unemployment conditions was least important (11) only to size of community (12). The rest of the group rankings were within two places of each other.

Data information on rank of local program characteristics between the two groups of teacher groups based on their level of student

participation in SOEP is provided in Table 30. The characteristics were drawn from the responses provided on the questionnaire on the level of

Table 30. Rank of local program characteristics by teachers with less than sixty percent SOEP and sixty percent or more SOEP.

Characteristics	LOCAL PROGRAM	
	Departments 59%-SOEP	Departments 60%+SOEP
Extended contract for on-site instruction	1	1
Instruction on SOEP given in the classroom	3	2
SOEP required of all FFA members	11	3
SOEP required of all students	9	4
SOEP is a part of the vo-ag grade	12	5
Students required to set SOE goals	7	6-7
School administrative support of SOEP	2	6-7
Recognition through proficiency and achievement awards	6	8
Success of previous students in FFA and SOEP	4	9
Written goals and objectives for SOEP	8	10
Active program advisory council	10	11
Curriculum based on community needs	5	12
High school credit given for SOE	13-14	13
Class prerequisites required for advancement in vo-ag program	13-14	14
Active FFA Alumni Association	15	15
Other vocational mechanical courses offered in school	16	16

Note: 1 = highest rank; 16 = lowest rank

importance from: 5 (very important) to 1 (not important). Sixteen characteristics were ranked with 1 being the highest.

Agreement was reached on both the highest and lowest characteristics. Both groups deemed that extended contract for on-site instruction was 1 and other vocational mechanical courses offered in school was 16.

The greatest difference between groups was found in: 1) SOEP is part of vo-ag grade, 2) SOEP required of all students, and 3) curriculum based on community needs. The plus sixty percent SOEP group rated SOEP grades (5) and SOEP required of FFA members (3), and the less than sixty percent SOEP group rated the same characteristics (12) and (11), respectively. The less than sixty percent SOEP group felt that curriculum based on community needs (5) was more important than did the plus sixty percent SOEP group (12).

Other factors showing a difference of four and five are shown for the less than sixty percent SOEP and plus sixty percent SOEP group. They are as follows: 1) school administrative support for SOEP (2) and (6-7), 2) success of previous students in FFA and SOEP (4) and (9), and 3) SOE required of all students (9) and (4), respectively. The rest of the characteristics had differences of less than two places.

Data in Table 31 reveal the ranking difference between less than sixty percent SOEP and sixty percent or more SOEP as identified for parent/guardian or employer characteristics associated with a high percentage of students with supervised occupational experience programs. Characteristics were ranked 1 through 12 on the mean response of the different characteristics.

Table 31. Rank of parent/guardian or employer characteristics by teachers with less than sixty percent SOEP and sixty percent or more SOEP.

Characteristics	PARENT/GUARDIAN OR EMPLOYER	
	Departments 59%-SOEP	Departments 60%+SOEP
Supports agriculture education	2	1
Interested in students becoming involved in agriculture/agribusiness	3	2
Support of both parents	4	3
Knowledgeable about SOEP	1	4-5-6
Land or facilities are available for SOE	7	4-5-6
Support school activities	9	4-5-6
Have time to assist students with SOEP	6	7
Actively involved in vo-ag program	5	8
Involved in community activities	11	9
Previous FFA membership or association	8	10
Capable of providing financial assistance	12	11
Previous vo-ag experience	10	12

Note: 1 = highest rank; 12 = lowest rank

The highest rank for the less than sixty percent SOEP group was: knowledgeable about SOEP (1). The highest rank for the plus sixty percent SOEP group was: supports agriculture education (1). Lowest ranking for the less than sixty percent SOEP group was: capable of providing financial assistance (12), and lowest ranking for the plus sixty percent SOEP group was: previous vo-ag experience (12).

Slight differences were found between the low and high SOEP groups on two characteristics: 1) the less than sixty percent group felt that

knowledgeable about SOEP (1) and actively involved in vo-ag program (5) were more important than did the plus sixty percent group (4-5-6; and 8, respectively). The plus sixty percent group deemed support school activities more important (4-5-6) than the less than sixty percent group (9). All other factors had a difference of less than two places in rank.

Non-Typical SOEP Comparisons by SOEP Subgroup

The final table (Table 32) contains data indicating which non-typical SOEP titles would be accepted by the two different groups of teachers (less than sixty percent SOEP and sixty percent or more SOEP). Twenty-six teachers in the lower SOEP and twenty teachers in the higher SOEP responded to the twenty different titles. Teachers in programs with less than sixty percent SOEP identified fourteen of twenty titles that would be acceptable as supervised occupational experience programs for their students, with a positive response of fifty percent or more. Groundskeeper was identified by all twenty-six teachers as an SOEP that they would be willing to accept.

Teachers in programs with sixty percent SOEP identified eleven of twenty titles that they would accept as an SOE requirement for their students with a positive response of fifty percent or more. Groundskeeper, carpenter's assistant, and mechanic assistant were identified as "yes" by all twenty teachers.

Those titles accepted by both groups were: 1) groundskeeper, 2) service station attendant, 3) carpenter's assistant, 4) cutting firewood, 5) painting, 6) mechanic assistant, 7) truck driver, 8) branding,

Table 32. Frequency distribution of acceptable SOEP titles.

	Departments 59%-SOEP			Departments 60%+SOEP		
	Yes	No	% Yes	Yes	No	% Yes
Groundskeeper	26	0	100	20	0	100
Restaurant cook	14	12	54	9	11	45
Waitress	6	20	23	5	15	25
Service station attendant	24	2	92	18	2	90
Carpenter's assistant	25	1	96	20	0	100
Custodian	17	9	65	9	11	45
Cutting firewood	23	3	88	18	2	90
Painting	22	4	84	19	1	95
Grocery store boxboy	12	14	46	10	10	50
Hotel busboy	6	20	23	4	16	20
Mechanic assistant	25	1	96	20	0	100
Truck driver	25	1	96	17	3	85
Branding	23	3	88	15	5	75
Trapping	22	4	84	19	1	95
Paper delivery	9	17	35	7	13	35
Lifeguard	9	17	35	5	15	25
Highway flagman	15	11	58	8	12	40
Oilfield roughneck	19	7	73	9	11	45
Mine worker	18	8	69	12	8	60
Military	5	21	19	5	15	25
Total response	345	175	66.3	249	157	62.3

Note: Any answer left blank or marked as a question mark was counted as a "no" response.

9) trapping, and 10) mine worker. Those titles accepted by less than sixty percent SOEP teachers and not by the plus sixty percent SOEP teachers were: 1) custodian, 2) restaurant cook, 3) highway flagman, and 4) oilfield roughneck. The title accepted only by the plus sixty percent SOEP was grocery store boxboy. Titles not acceptable to either group were: 1) waitress, 2) hotel busboy, 3) lifeguard, and 4) military.

Total response for those non-typical titles was 66.3 percent positive response for those teachers with less than sixty percent SOEP and 62.3 percent positive response for those teachers with sixty percent and more SOEP.

CHAPTER IV

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Conclusions

Using data as presented in Chapter III of this study, the following conclusions have been reached:

1. The greatest number of teachers in the state of Montana has over five years experience, teaches in a school with an enrollment of over one-hundred students, has a department of under forty students, and has over seventy-five percent FFA membership. Over two-thirds of teachers in the state of Montana reported that students in their departments had less than sixty percent of supervised occupational experience programs during the years 1982-1984.
2. Community size, other vocational offering in the school, and a teacher's professional association with MVATA have little impact on whether or not students participated in supervised occupational experience programs.
3. Teachers in departments with less than sixty percent supervised occupational experience programs have a tendency to accept more different types of supervised occupational experience programs. Montana vocational agriculture teachers have different perceptions as to what types of programs can be used for supervised occupational experience programs.

4. Teachers that relate well with students, enjoy working with students and parents, are committed to vo-ag and supervised occupational experience programs, have the time to communicate with students and parents, and have the ability to organize supervised occupational experience programs will have a higher percentage of students with supervised occupational experience programs.
5. Communities that have an understanding of the FFA and supervised occupational experience program, basic economy of agriculture/agribusiness, and strong commitment to agriculture will have a higher percentage of students with supervised occupational experience programs.
6. Local programs that have extended teacher contracts which allow for on-site instruction, require SOEP for all students, require SOEP for part of student's grade, and have in-class instruction time for SOE will increase the probability of students participating in supervised occupational experience programs.
7. Parents/guardians or employers who support agriculture education and are interested in students becoming involved in agriculture/agribusiness will promote a higher percentage of students conducting supervised occupational experience programs.
8. Smaller size schools (less than one-hundred students) and vo-ag departments (less than forty students) will have a higher percentage of supervised occupational experience programs and FFA membership.

Implications

From data reported in Chapter III, the researcher drew the following implications:

1. Not all Montana vocational agriculture teachers are requiring all students to carry a supervised occupational experience program and teachers might not be counting all students on the Form 2. There is a varied number of experience titles counted in the state that might be used by one teacher and not accepted by another. Therefore, standards need to be developed as to which SOEP titles could be used for students.
2. Because teachers are the most important factor affecting supervised occupational experience programs and since teachers have the ability to improve community, local program, and parent/guardian or employer characteristics identified to be associated with student participation in supervised occupational experience programs, more professional workshops and conferences should probably receive more attention in the future.
3. Ways should be devised to help teachers understand how to allocate more time for organizing and working with supervised occupational experience programs.
4. Since Montana vocational agriculture teachers in general are not using written plans or goals for conducting supervised occupational programs, although teachers with less than five years experience may be using goals and objectives more frequently than more

experienced teachers. Possibly in-service training in the area of written goals or objectives for SOEP's might be beneficial.

Recommendations

The following recommendations are made based on the results of this study:

1. Standards need to be developed to assure consistency in supervised occupational experience programs around the state.
2. Teachers need to implement some kinds of SOEP requirements for their students with each local program.
3. Written goals and objectives for SOEP's need to be developed and put into action in the state of Montana.
4. Education workshops and seminars need to be presented to teachers in the field on organizing, conducting and reporting SOE programs.
5. Secondary vocational agriculture programs need increased funding to assist in excess costs to the local school district for on-site instruction of supervised occupational experience programs.
6. All vocational agriculture departments in the state need to conduct a summer program for the on-site instruction of students.
7. More classroom time needs to be spent teaching SOEP.
8. Informational programs and materials must be developed to substantiate FFA and SOEP value to parents/guardians, employers and communities.

Recommendations for Further Study

The results of the data presented in Chapter III indicate the following recommendations for further study:

1. Acceptable types of supervised occupational experience programs for the state of Montana need to be determined.
2. Perceptions of what factors are determined by parents/guardian or employer to be important to quality supervised occupational experience programs should be identified.
3. Effective on-site instruction for supervised occupational experience programs needs to be identified by parents, students and employers.
4. It needs to be determined if supervised occupational experience programs really make a difference in the career choices of students or the effectiveness of persons on the job upon entry.
5. Additional studies for the state of Montana need to be conducted to determine why students are not participating in FFA and SOEP.

Summary

Identifying the perceptions of Montana vocational agriculture teachers toward factors affecting supervised occupational experience programs is only the first step in improving the quantity and quality of SOEP in the state. Teachers, teacher educators, state supervisors and local school administration need to consider carefully those factors identified in this study as well as other literature to develop state plans for increasing student participation in SOEP. With state

legislatures facing increasing financial constraints and education in the spotlight, all non-productive programs in the school system are being carefully scrutinized.

Vocational agriculture programs must remain vocational in nature and not become a general agriculture course. This can best be accomplished by assuring that each student has a supervised occupational experience program while enrolled in vocational agriculture.

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APPENDICES

APPENDIX A
QUESTIONNAIRE

TEACHER SURVEY ON SUPERVISED OCCUPATIONAL EXPERIENCE

INSTRUCTIONS: Please answer each question by writing your answer in the space provided. The validity of the study depends on the accuracy of your response.

1. How many years have you been teaching Vo-Ag in Montana? _____
How many years in your present system? _____
2. What is the enrollment of your school (9-12)? _____
3. What is the enrollment of your Vo-Ag program (9-12)? _____
4. What is your FFA membership (9-12)? _____

INSTRUCTIONS: Please respond to each of the following questions about characteristics affecting supervised occupational experience programs. Circle the answer you feel best describes how you feel about the statement.

- A. How important are these teacher characteristics in achieving a high percentage of students with supervised occupational experience programs?

1. Relates well with students	5	4	3	2	1
2. Wide variety of on-job experiences	5	4	3	2	1
3. Commitment to SOEP	5	4	3	2	1
4. Professionally involved in MVATA	5	4	3	2	1
5. Knowledgeable in agriculture subject areas	5	4	3	2	1
6. Makes efficient use of time	5	4	3	2	1
7. Enjoys working with individual students and parents	5	4	3	2	1
8. Had Vo-Ag and FFA experience when in high school	5	4	3	2	1
9. Searches for innovative types of SOE's	5	4	3	2	1
10. Time to communicate with students and parents	5	4	3	2	1

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11. Desire to help students achieve FFA recognition	5	4	3	2	1
12. Committed to the total Vo-Ag program	5	4	3	2	1
13. Participates in technical and professional workshops and conferences	5	4	3	2	1
14. Teacher is involved in the community	5	4	3	2	1
15. Ability to organize SOE supervision	5	4	3	2	1
16. Success of SOE experience prior to entering teaching	5	4	3	2	1

B. How important are these community characteristics in achieving a high percentage of students with supervised occupational experience programs?

1. Progressive school system	5	4	3	2	1
2. Unemployment conditions	5	4	3	2	1
3. Former Vo-Ag members are still in the community	5	4	3	2	1
4. Basic community economy is agriculture/agribusiness	5	4	3	2	1
5. Community service area is agriculture related	5	4	3	2	;
6. Understanding the FFA and SOE program	5	4	3	2	1
7. Expanding, forward-looking community	5	4	3	2	1
8. Community strongly supports agriculture	5	4	3	2	1
9. Size of community (large versus small)	5	4	3	2	1
10. Majority of students live on farms/ranches	5	4	3	2	1
11. Publicity available through local media	5	4	3	2	1
12. Stable community populations	5	4	3	2	1

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C. How important are these local program characteristics in achieving a high percentage of students with supervised occupational experience programs?

1. Extended contract for on-site instruction	5	4	3	2	1
2. School administrative support of SOEP	5	4	3	2	1
3. SOEP is a part of the Vo-Ag grade	5	4	3	2	1
4. Active FFA Alumni Association	5	4	3	2	1
5. SOEP required of all FFA members	5	4	3	2	1
6. High school credit given for SOE	5	4	3	2	1
7. Class prerequisites required for advancement in Vo-Ag program	5	4	3	2	1
8. Written goals and objectives for SOEP	5	4	3	2	1
9. Instruction on SOEP is given in the classroom	5	4	3	2	1
10. Success of previous students in FFA and SOEP	5	4	3	2	1
11. Recognition through proficiency and achievement awards	5	4	3	2	1
12. Curriculum based on community needs	5	4	3	2	1
13. Student required to set SOE goals	5	4	3	2	1
14. Other vocational mechanical courses offered in school	5	4	3	2	1
15. SOE is required of all students	5	4	3	2	1
16. Active program advisory council	5	4	3	2	1

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D. How important are these parent/guardian or employer characteristics in achieving a high percentage of students with supervised occupational experience programs?

1. Land or facilities are available for SOE	5	4	3	2	1
2. Supports agriculture education	5	4	3	2	1
3. Knowledgeable about SOEP	5	4	3	2	1
4. Interested in students becoming involved in agriculture/agribusiness	5	4	3	2	1
5. Previous FFA membership or association	5	4	3	2	1
6. Capable of providing financial assistance	5	4	3	2	1
7. Have time to assist students with SOEP	5	4	3	2	1
8. Actively involved in Vo-Ag program	5	4	3	2	1
9. Involved in community activities	5	4	3	2	1
10. Previous Vo-Ag experience	5	4	3	2	1
11. Support school activities	5	4	3	2	1
12. Support of both parents	5	4	3	2	1

INSTRUCTIONS: For each of the following non-typical SOEP titles indicate which you would accept as a SOE requirement for your students.

1. Groundskeeper	yes _____	no _____
2. Restaurant cook	yes _____	no _____
3. Waitress	yes _____	no _____
4. Service station attendant	yes _____	no _____
5. Carpenter's assistant	yes _____	no _____
6. Custodian	yes _____	no _____
7. Cutting firewood	yes _____	no _____

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- | | | |
|-------------------------|-----------|----------|
| 8. Painting | yes _____ | no _____ |
| 9. Grocery store boxboy | yes _____ | no _____ |
| 10. Hotel busboy | yes _____ | no _____ |
| 11. Mechanic assistant | yes _____ | no _____ |
| 12. Truck driver | yes _____ | no _____ |
| 13. Branding | yes _____ | no _____ |
| 14. Trapping | yes _____ | no _____ |
| 15. Newspaper delivery | yes _____ | no _____ |
| 16. Lifeguard | yes _____ | no _____ |
| 17. Highway flagman | yes _____ | no _____ |
| 18. Oilfield roughneck | yes _____ | no _____ |
| 19. Mine worker | yes _____ | no _____ |
| 20. Military | yes _____ | no _____ |

APPENDIX B
QUESTIONNAIRE COVER LETTER

June 11, 1985

Dear Vo-Ag Instructors:

Please take a few minutes of your time to fill out this questionnaire on Supervised Occupational Experience Programs.

I would like the questionnaire returned to Dr. Bishop or Dr. Shelhamer during the break at 10:30 Thursday morning.

The questionnaire must be returned in the envelope so that they can be sorted into study groups.

Thank you in advance for your assistance.

Duane A. Gebhardt