

Factors Limiting Vocational Agriculture Student Participation in Supervised Occupational Experience Programs in Nebraska

Richard M. Foster, Associate Professor
Agricultural Education
University of Nebraska

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Supervised occupational experience (SOE) programs have been a part of vocational agriculture and agribusiness since its inception. The Smith-Hughes Act of 1917 provided federal funding for vocational agriculture and required ". . . directed or supervised practice in agriculture, either on a farm provided by the school or other farm, for at least six months per year" (Stimson, 1919). Vocational agriculture and the industry of agriculture have changed dramatically since that time. However, the role of SOE in the comprehensive vocational agriculture program remains fundamentally the same (Barrick, 1981).

Lee (1980) expressed concern that SOE in our vocational agriculture program was ". . . slipping away, and without it we would lose one of the pillars on which vocational education in agriculture/agribusiness has been built." If student participation in SOE is indeed slipping, steps must be taken to determine the factors affecting participation and implement programs to address those problems.

Objectives

The primary purpose of this study was to identify factors limiting student participation in SOE programs in Nebraska, as perceived by Nebraska vocational agriculture instructors. Specific objectives included:

1. Identify SOE-related characteristics of Nebraska vocational agriculture instructors.
2. Determine the importance of selected school district, vocational agriculture, economic, student, and social factors in limiting student participation in SOE.
3. Determine differences among factors limiting student participation in SOE by length of contract, number of SOE on-site instructional visits per year, hours employed in addition to vocational agriculture duties and years of teaching experience.

Procedures

The population in this study included instructors in the 136 secondary vocational agriculture programs in Nebraska. A 50% random sample (68 instructors) was selected to participate and provide data for this study.

A mailed survey instrument was used to collect data. The instrument was developed by members of the University of Nebraska Department of Agricultural Education. It was reviewed for clarity, understanding and completeness by a jury of vocational agriculture instructors who were not selected as part of the sample. The revised instrument was mailed to an additional twelve non-sample vocational agriculture instructors to determine reliability. A Cronbach alpha reliability coefficient was computed for each of the five dependent variable sections. All sections had a reliability coefficient of .82 or higher.

A one-to-nine scale was used to evaluate the importance of each of the 42 items as a factor limiting vocational agriculture student participation in SOE. The items were ranked (1) no importance in limiting participation; (5) average importance in limiting participation; and (9) high importance in limiting student participation in SOE.

The survey also collected data associated with vocational agriculture instructors, vocational agriculture programs, SOE policies and SOE practices in Nebraska. A follow-up of non-respondents was conducted. A t-test analysis indicated that there were no significant differences ($\alpha=.05$) between initial respondents and non-respondents. All data were pooled to arrive at a final response rate of 62 of 68, or 91%.

Analysis of data included calculation of frequencies, means and standard deviations on all items. Analysis of variance (ANOVA) for a two-factor experiment with repeated measures on one factor was performed to determine differences in mean importance ratings of limiting factors. A Tukey post hoc test was used to determine where actual differences existed ($\alpha=.05$).

Results

Self-reported, SOE-related demographic information of interest in this study were: (a) respondents had an average of 9.9 years of teaching experience; (b) 68% had completed at least some vocational agriculture FFA in high school; (c) 52% had completed four years of high school vocational agriculture; (d) 20% were employed 20 hours or more outside vocational agriculture; (e) 40% had written SOE policies for their program; (f) 90% required SOE of all their students; (g) 90% of all students participated in SOE; and (h) 52% conducted two or more on-site visits per student per year.

School District Factors

Factors limiting student participation in SOE were considered in five specific areas perceived to have an impact on vocational agriculture. When respondents were asked about selected school district policy factors, it was observed that only the policy of "no teacher time assigned for SOE supervision" was perceived to have above average importance in limiting student participation in SOE (a mean of 5.2 on a nine-point scale). The seven remaining school district factors were rated as being of less than average importance (<5.0) in limiting participation in SOE.

Vocational Agriculture Factors

Respondents indicated that some vocational agriculture program limitations may prohibit students from maximizing participation in SOE. Nebraska teachers rated "no facilities available for non-traditional SOE programs" and "no school land-laboratories available" as being above average in importance for limiting student participation in SOE (ratings 5.85 and 5.58 respectively). Ten remaining vocational agriculture program factors were rated as being less than average importance as factors limiting SOE participation.

Economic Factors

Seven of the ten economic factors listed were rated as above average in importance as factors limiting SOE participation. Economic factors was the only area with a composite mean above (5) average importance.

Economic factors considered most important in limiting SOE participation were: (a) current loan interest rates are too high; (b) limited money to finance SOE available; (c) parents' ability to help with financing is limited; (d) financing available from lending institutions is limited; (e) number of agribusinesses available for placement is limited; (f) agribusinesses are hiring fewer student learners; and (g) minimum wage is too high for employing student learners.

Vocational Agriculture Student Factors

Only two student factors were rated as above average in importance as factors limiting participation in SOE. "Students lack the desire for SOE" (5.10) and "students dislike maintaining SOE records" (6.80) were identified as limiting factors. The eleven remaining student factors were rated as being below average in importance.

Social Factors

Two social factors were identified as being of greater than average importance in limiting student participation in SOE. They were: "student participation in sports is excessive" (6.39) and "student participation in school activities other than sports is excessive" (5.69). Three factors were rated below 3.0.

Factors Limiting Student Participation in SOE

The fourteen factors identified as most limiting to participation in SOE, listed in rank order, were:

1. Students dislike maintaining SOE program records (6.80).
2. Student participation in sports is excessive (6.39).
3. Current Loan interest rates are too high (6.30).
4. Money available for students to finance SOE is limited (6.26).
5. Agribusinesses are hiring fewer student-learners (6.25).
6. Parents' ability to help with financing is limited (6.08).
7. Number of agribusinesses needed for placement in the community is limited (5.90).
8. No facilities available for non-traditional SOE programs (5.85).
9. Student participation in school activities other than sports is excessive (5.69).
10. No school land-laboratory available (5.58).
11. Financing through lending institutions is limited (5.28).
12. Minimum wage is too high for employing students (5.26).
13. No teacher time assigned for SOE supervision (5.24).
14. Students lack the desire for an SOE program (5.10).

Factors Not Limiting Participation In SOE

The twenty factors having the least impact on limiting SOE participation, listed in rank order, were:

1. Local education association discourages after-school activity (2.23).
2. Vocational agriculture instructor has limited teaching experience (2.23).
3. Community attitudes about vocational agriculture are negative (2.66).
4. Community attitudes about SOE are negative (2.74).
5. Students are from affluent families; don't need the employment (2.88).
6. Instructor lacks knowledge of SOE and record keeping (3.18).
7. Other teachers show no respect for vocational agriculture (3.20).
8. Too much emphasis is placed on FFA contests in the curriculum (3.29).
9. Transportation for SOE on-site instruction not provided by district (3.32).
10. Limited number of extended contract days (3.31).
11. Limited mileage budget available for SOE on-site instruction supervision (3.32).
12. Low socio-economic level in the community (3.33).
13. SOE instructional materials not available to teach SOE as part of the curriculum (3.34).
14. The FFA program over-shadows the importance of SOE (3.35).
15. Students have a negative attitude about vocational agriculture (3.38).
16. Instructor dislikes teaching SOE and record keeping (3.39).
17. Students lack transportation to and from SOE program (3.39).
18. Peer pressure works against SOE involvement (3.39).
19. Too many students to supervise individual SOE programs (3.40).
20. Students are more involved with 4-H in the community (3.49).

No significant differences in importance ratings were observed when compared by years of teaching experience, length of teaching contract, hours employed in duties outside of vocational agriculture and number of on-site instructional visits per student.

Conclusions

Based on the findings of this study, the following conclusions were drawn.

1. Of the five areas of influence surveyed by this study, economic factors were consistently rated as important considerations in limiting student participation in SOE in Nebraska high schools. Seven of the ten economic factors were rated above average importance (5 or above on a 9-point scale).

This finding may be the direct result of the continued economic slump in the agricultural industry in Nebraska. Economic limitations may also reflect the escalating costs of producing agricultural products and the scarcity of employment opportunities in rural Nebraska, especially for youth.

2. Lower mean ratings of school district factors indicated administrative support was the least limiting factor for student participation in SOE. Administrative support was considered at least adequate by Nebraska vocational agriculture teachers.

3. Nebraska teachers indicated that selected vocational agriculture program factors did not generally contribute to a lack of participation in SOE. Specifically, instructor knowledge of SOE and record keeping, excessive emphasis on FFA, limited extended contract days and lack of instructional materials did not limit student participation in SOE. However, care in interpretation must be taken since these are self-reported data.

4. Community attitudes about vocational agriculture and SOE were not important factors in limiting SOE participation.

5. Length of teaching contract, hours employed outside of vocational agriculture and number of SOE visits per student per year had no effect on how respondents rated importance of limiting factors.

Recommendations

Based on the findings from this study, the following recommendations are made to enhance student participation in SOE in Nebraska.

1. Immediate steps should be taken to address economic constraints affecting student participation in SOE by working with lending institutions, community business people, local FFA alumni, parents and FFA chapters to increase the availability and opportunities for financial assistance.

2. Teachers of vocational agriculture should investigate ways of incorporating the use of school facilities and land laboratories to enhance SOE opportunities for non-traditional students.

3. Since excessive time in outside activities and other school activities did cause students to limit SOE participation, teachers of vocational agriculture should work cooperatively with administrators to inform them of the importance of SOE participation for vocational agriculture students.

4. Teachers of vocational agriculture should investigate ways of involving students in direct laboratory experience programs which require less financial assistance, yet still allow experiential learning in an area of occupational interest to take place.

5. Teachers of vocational agriculture should investigate ways of implementing placement SOE programs requiring low initial financial investment, yet provide the opportunity for earning wages and gaining experiences.

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