

IMPORTANCE OF
SUPERVISED OCCUPATIONAL EXPERIENCE
PROGRAM RECORDS IN
DEVELOPING SELECTED ABILITIES

*Duane L. Davis and David L. Williams
Agricultural Education Department
Iowa State University*

The records of a vocational agriculture student should be an outgrowth of selecting, planning, and conducting his/her supervised occupational experience (SOE) program. Records provide an individualized means for a student to systematically record the plans, actions, and results of an SOE program. Keeping SOE program records should be a learning experience for the student that develops occupational abilities. Records should also contribute to learning through classroom-laboratory instruction, FFA activities, and the SOE program from which they are derived. Teachers frequently emphasize record keeping procedures and neglect the purpose. Records kept for the sake of meeting a program or degree requirement are of little educational value. A proper perspective of the purpose of record keeping is necessary for both the student and teacher.

Research completed by Williams (1977) identified "keeping records" as an occupational ability developed by Iowa vocational agriculture students through their SOE programs. Davis (1978) designed the research reported herein to focus on the specific record keeping abilities developed through SOE program records.

Vocational agriculture instructors are in positions to influence the attitudes of students toward SOE program records. Their attitudes about records are likely to be passed on to their students. The attitudes teachers possess toward SOE record keeping are developed to a large extent during their high school years and preservice teacher education program.

Purpose

The purpose of this study was to determine the importance of vocational agriculture SOE program record keeping in developing selected abilities related to record keeping. The study was designed to determine if significant differences existed in the importance of SOE record keeping in developing abilities among former vocational agriculture students classified as freshmen, sophomores, juniors, and seniors in Agricultural Education at Iowa State University.

Methodology

The population for the study was the undergraduate students at Iowa State University whose primary major was Agricultural Education. The population was further defined to include only those enrolled during Winter Quarter, 1978, who had completed one or more years of high school vocational agriculture. A stratified random sample of 25 freshmen, 25 sophomores, 25 juniors, and 25 seniors was drawn from the population.

A questionnaire was developed to gather data pertaining to the students and their vocational agriculture programs and the importance of SOE record keeping in developing selected abilities. The respondents were asked to indicate on an eleven-point scale how important they thought their SOE program record keeping was in developing 27 abilities. The importance scale ranged from "no importance" = 1 to "utmost importance" = 11. Data were collected by mailed questionnaires during January and February, 1978. The procedures used yielded a 98 percent return.

The ratings were transformed to values from 0 to 16 to spread out the tails of the original 11-point scale and to push together the middle as recommended by Warren, et al (1969). Means and standard deviations were computed for each variable by sub-groups and the total sample. Analysis of variance was used to test for significant difference among the four groups of students on the 27 abilities. When significant differences were observed, the Scheffe' test was used to identify where the difference existed.

Findings

The ranks, means, and standard deviations for the 27 record keeping abilities are reported in Table 1 for the total sample. Twenty-two out of the 27 abilities had means above mid-point on the importance scale. However, it should be noted that only one ability, "determine profit or loss," had a mean rating above twelve. The five abilities rated the highest by the 98 respondents were: determine profit or loss, analyze livestock production costs, keep useful records, maintain up-to-date records, and maintain accurate records. Three of these abilities pertained to record keeping procedures and two to the use of records. The two top abilities pertained to short-range production management procedures that require accurate records.

The five record keeping abilities rated the lowest were: prepare business agreements, calculate income tax, obtain credit, record off-farm employment experiences, and calculate depreciation. Three of these pertain to the long-range use of records, one to business procedures, and one to agribusiness employment.

The ranks and means for the abilities, "attain a higher FFA degree" and "meet vo-ag teacher's requirements," should be noted. The means for both were above mid-point on a seventeen-point scale, indicating that the respondents thought their SOE was important in attaining FFA degrees and in meeting teacher requirements. However, this was not the case with the ability, "pass the vo-ag course," which had a rank of 22 and a mean of 8.44. A relatively low rating was also observed for the importance of SOE program records in earning FFA proficiency awards.

The relatively high mean value (10.63) for ability ranked sixth (Table 1) suggests that SOE program records help students appreciate the value of records. This behavior in the affective domain was ranked just under behaviors in the cognitive domain that pertained to keeping and using records.

There were significant differences among freshmen, sophomores, juniors, and seniors on the perceived importance of SOE program record keeping in developing only six of the 27 abilities. For five abilities where significant differences were found, the means were significantly higher for freshmen than for sophomores, juniors, and/or seniors. These abilities were: determine profit or loss, maintain up-to-date records, maintain accurate records, make management decisions, and pass the vocational agriculture course. These findings suggest that as former vocational agriculture students advance in their college studies, they place less importance on their SOE program records as a means for developing some abilities. The mean for seniors was significantly higher than the mean for sophomores for "goals for productive enterprise."

There was similarity among the four groups in the record keeping abilities with the highest means. The five abilities rated the highest by freshmen were: determine profit or loss, maintain up-to-date records, maintain accurate records, keep useful records, and appreciate the value of records. It should be noted that all five of these abilities pertain to record keeping procedures and attitudes toward records.

The five record keeping abilities with the highest means for the sophomore group were: analyze crop production costs, determine profit or loss, appreciate the value of records, maintain up-to-date records, and keep useful records. The five abilities receiving the highest ratings by junior students were: determine profit or loss, analyze livestock production costs, keep useful records, appreciate the value of records, and maintain up-to-date records. The seniors placed the highest ratings on: determine profit or loss, analyze livestock production costs, keep useful records, appreciate the value of records, and maintain accurate records.

Table 1

RANK ORDER, MEANS AND STANDARD DEVIATIONS FOR PERCEIVED IMPORTANCE OF SOE RECORD KEEPING IN DEVELOPING ABILITIES RELATED TO RECORD KEEPING FOR THE TOTAL SAMPLE

Ability	Rank	Mean	Standard Deviation
Determine profit or loss ¹	1	12.06	3.88
Analyze livestock production costs	2	11.24	6.11
Keep useful records	3	10.84	3.05
Maintain up-to-date records ¹	4	10.67	3.29
Maintain accurate records ¹	5	10.65	3.24
Appreciate the value of records	6	10.63	3.10
Keep neat records	7	10.19	2.96
Attain a higher FFA degree	8	9.79	4.52
Meet Vo-Ag teacher's requirement	9	9.70	4.07
Cultivate initiative in record keeping	10	9.68	2.78
Measure overall SOE program success	11	9.59	3.32
Make management decisions ¹	12	9.59	3.48
Analyze crop production costs	13	9.57	4.51
Compare goals and actual results	14	9.55	3.27
Improve my SOE program	15	9.49	3.21
Set goals for productive enterprises ²	16	9.45	2.91
Set efficiency goals	17	9.29	3.43
Earn a proficiency award in FFA	18	9.04	4.38
Select agricultural skills to develop	19	8.92	5.50
Budget for productive enterprises	20	8.84	3.83
Plan improvement projects	21	8.54	3.04
Pass the Vo-Ag course ¹	22	8.44	6.65
Prepare business agreements	23	7.87	3.59
Calculate income tax	24	7.09	5.27
Obtain credit	25	6.88	5.07
Calculate depreciation	26	6.86	4.24
Record off-farm employment experiences	27	6.86	4.58

¹Group means differed at .05 level (freshmen greater than sophomores, juniors, and/or seniors).

²Group means differed at .05 level (seniors greater than sophomores).

Abilities pertaining to record keeping procedures and appreciation of records remained in the top five list for all groups; however, abilities related to the use of records in analyzing production costs were included in the top five abilities for only sophomores, juniors, and seniors.

Conclusions

The following conclusions were made:

1. Mean scores ranging from 6.86 to 12.06 of a possible score of 16 were observed for the 27 abilities, indicating a lack of highly positive feelings toward the importance of SOE program records in developing the abilities studied.
2. SOE program records were of "average importance" or above in developing abilities related to record keeping procedures, use of records, developing an appreciation for records, and succeeding in vocational agriculture and the FFA.
3. SOE program records were more important in developing abilities related to record keeping procedures and agricultural production than abilities related to decision making and improvement of agricultural programs; in analyzing livestock production cost than in analyzing crop production cost; records of on-going activities than abilities related to planning agricultural activities; to production agriculture than to off-farm agribusiness employment experiences; and to short-term than to long-term use of records.
4. University freshmen, sophomores, juniors, and seniors were in agreement on the importance of their high school SOE record keeping in developing 21 of the 27 abilities.
5. Five observations were made where ratings by freshmen were significantly higher than ratings by one or more of the other groups, indicating that college studies influence the importance former vocational agriculture students place on SOE record keeping in developing some abilities.

Implications for Teacher Education

The following implications were made:

1. Preservice and inservice vocational agriculture teacher education should include instruction on the philosophy of record keeping, mechanics of record keeping, and the use of accurate records.
2. Instructional materials developed for use in teaching students to develop and conduct SOE programs should emphasize the importance of records in planning, conducting, and evaluating SOE programs.
3. Vocational agriculture teachers should include systematic instruction on SOE record keeping and the use of records.
4. Vocational agriculture teachers should direct students in the use of SOE records in planning SOE programs, recording actions, analyzing enterprises and experiences, and assessing SOE program progress.
5. Vocational agriculture teachers should use SOE program records of their students in teaching topics pertaining to production and management of agricultural production enterprises and agribusiness activities.
6. More attention should be given to keeping records and use of records for off-farm employment experiences, especially placement SOE programs in agribusiness.
7. Further research should be conducted on the value of SOE program records and to identify effective ways of teaching record keeping and use of records.

References

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