

AN ANALYSIS OF THE PRACTICABILITY OF THE KANSAS VOCATIONAL  
AGRICULTURE FARMING PROGRAM RECORD BOOK

by 632

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B. S., Kansas State University, 1950

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A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

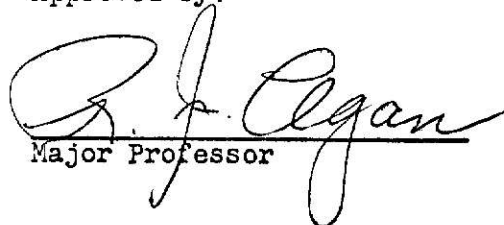
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The author expresses his appreciation to the members of his family their patience, understanding, and encouragement.

## AUTOBIOGRAPHY

The author was born at Anness, Kansas on September 16, 1927. He was reared on a farm in south central Kansas. He received the majority of his elementary education at a rural grade school and graduated from Norwich High School in Norwich, Kansas. He was awarded a Bachelor of Science Degree in Agricultural Education from Kansas State University in 1950.

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## TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM AND DEFINITIONS OF TERMS USED	1
The Problem . . . . .	2
Statement of the problem . . . . .	2
Objective . . . . .	2
Limitations and Delimitations . . . . .	2
Definitions of Terms Used . . . . .	3
Practicability . . . . .	3
Vocational agriculture . . . . .	3
Farming program . . . . .	4
Ag-related occupational experiences . . . . .	4
Agricultural mechanics . . . . .	4
Future Farmers of America . . . . .	4
<u>Kansas Vocational Agriculture Record Book</u> . . . . .	4
Teacher educator . . . . .	5
State supervisory staff members . . . . .	5
II. REVIEW OF THE LITERATURE . . . . .	6
Importance of Farm Records . . . . .	6
Useful Farm Records . . . . .	9
Comparison of Record Books Used in Several States . . . . .	12
Literature on Improvement of Farm Records . . . . .	14
III. DESIGN AND PROCEDURE . . . . .	18
The Research Design . . . . .	18
The Sample . . . . .	19

CHAPTER	PAGE
The Measuring Device . . . . .	19
The Method of Gathering Data . . . . .	20
The Method of Presenting Data . . . . .	20
The Method of Analysis . . . . .	20
IV. THE FINDINGS . . . . .	22
Characteristics of Groups Surveyed . . . . .	22
Opinionnaire Part I Data . . . . .	24
Usefulness to vo-ag student . . . . .	30
Usefulness to vo-ag graduates who became farmers . . . . .	32
Opinions as related to geographical location . . . . .	40
Opinions as related to teaching experience . . . . .	41
Opinions as related to institution granting the	
Bachelor of Science Degree . . . . .	42
Opinions as related to pupil load . . . . .	43
Geographical location and usefulness of training	
to farmers . . . . .	44
Years of teaching experience and usefulness of record	
keeping training to farmers . . . . .	45
Opinionnaire Part II Data . . . . .	47
Adequacy of teacher education in the area of record	
keeping teaching . . . . .	47
Complexity of the <u>Record Book</u> . . . . .	48
Too much time spent on record keeping? . . . . .	49
The <u>Record Book</u> and enrollment . . . . .	53
Ag-related occupations records . . . . .	53

CHAPTER	PAGE
Data processing and enterprise analysis . . . . .	53
Was the <u>Record Book</u> practicable? . . . . .	53
<u>Record Book</u> parts listed by usefulness for vo-ag student categories . . . . .	54
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	56
Summary and Conclusions . . . . .	57
Recommendations . . . . .	61
BIBLIOGRAPHY . . . . .	62
APPENDIX . . . . .	65

# LIST OF TABLES

TABLE	PAGE
I. Vo-Ag Teacher Sample and Population Data . . . . .	23
II. Mean Rating Score Data on Usefulness of <u>Record Book</u> for Vo-Ag Students . . . . .	26
III. Mean Rating Score Data on Usefulness of Record Keeping Training to Vo-Ag Students who Became Farmers . . . . .	33
IV. Data on Opinionnaire Part I Rating Score Findings . . . . .	39
V. Data on Vo-Ag Teachers' Ratings of Usefulness of <u>Record Book</u> for Vo-Ag Students as Affected by Geographical Location of the Teachers' Vo-Ag Departments . . . . .	40
VI. Data on Vo-Ag Teachers' Ratings of Usefulness of <u>Record Book</u> for Vo-Ag Students as Affected by Years of Teaching Experience . . . . .	41
VII. Data on Vo-Ag Teachers' Ratings of Usefulness of <u>Record Book</u> for Vo-Ag Students as Affected by Institution Granting Bachelor of Science Degree . . . . .	43
VIII. Data on Effect of Pupil Load on Vo-Ag Teachers' Rating of the Usefulness of the <u>Record Book</u> for Vo-Ag Students . . . .	44
IX. Data on Vo-Ag Teachers' Ratings of Usefulness of the Record Keeping Training in Kansas to Vo-Ag Students who Became Farmers as affected by Geographical Location of Teachers' Vo-Ag Departments . . . . .	45

## TABLE

## PAGE

X.	Data on Vo-Ag Teachers' Ratings of Usefulness of the Record Keeping Training in Kansas to Vo-Ag Students who Became Farmers as Affected by Years of Teaching Experience . . . . .	46
XI.	Data on Opinions of Vo-Ag Teachers Concerning Adequacy of Teacher Education in the Area of Record Keeping Teaching .	48
XII.	Data on Opinions Concerning Complexity of the <u>Record Book</u> . . .	49
XIII.	Data on Opinions of Vo-Ag Teachers Concerning Per Cent of Total Teacher Time Spent in Area of Record Keeping . . . . .	50
XIV.	Data on Miscellaneous Opinionnaire Questions Concerning the <u>Record Book</u> . . . . .	51

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## CHAPTER I

### THE PROBLEM AND DEFINITIONS OF TERMS USED

The Kansas Vocational Agriculture Record Book (Record Book) was, at the time of the study, a farm account book in which all vocational agriculture (vo-ag) students in Kansas were expected to keep an accurate record of their farming program, ag-related occupations, leadership, and agricultural mechanics activities. It also provided provisions for a complete business and personal fiscal accounting system.

The Record Book that was being used during the 1969-70 school year had been developed over a period of approximately forty years. The writer of this report, a teacher of vocational agriculture for twenty years, had served on a committee of teachers which recommended improvements in the Record Book. It was his observation that the various changes that had been incorporated into the Record Book were made on the basis of recommendations from vo-ag teachers, vo-ag teacher educators, state supervisory staff members, and farm management specialists.

The writer observed over the years as a teacher of vo-ag that a difference of opinion had existed regarding the relative practicability of some of the content of the Record Book. The proponents of the use of the Record Book in its older form could cite valid reasons or theories to support their justification for the inclusion of some of the more complicated fiscal and cost accounting sections. Those persons that were desiring a revision of the Record Book, with an aim toward simplification, made reference to the point that the highly complex nature of the Record Book tended to result in

incomplete and inaccurate record keeping. They suggested that the Record Books submitted by State Farmer Degree applicants (State Farmer applicants supposedly represented the most outstanding Future Farmers of America (F.F.A.) members in Kansas--the top two per cent) were a true indication of the quality of the record keeping performance of Kansas vo-ag students. If these Record Books did represent this performance, it was evident to the writer that either the students and/or their teachers did not have the necessary knowledge and skill required to keep complete and accurate records in the Record Book or that the Record Book itself was no longer practicable.

## I. THE PROBLEM

Statement of the problem. It was the purpose of this study to survey opinions as to the usefulness of the various sections of the Record Book which was currently being used from the viewpoint of: (1) teachers of vocational agriculture; (2) state supervisory staff members; and (3) vocational agriculture teacher educators.

Objective. The objective of this study was to obtain the opinions of vo-ag teachers, state supervisory staff members, and vo-ag teacher educators in Kansas as to whether or not the Kansas Vocational Agriculture Record Book in its then existent form needed a revision.

## II. LIMITATIONS AND DELIMITATIONS

This study was limited to the 1969 edition of the Kansas Vocational Agriculture Record Book. The study was also limited to the opinions of: (1) vocational agriculture teachers who were teaching in vo-ag departments in Kansas; (2) those persons who were, at the time of the study, members of the State Supervisory Staff of the Agricultural Education Section of the Voca-



tional and Technical Education Division of the State Department of Public Instruction in Kansas; and (3) those persons who were, at the time of the study, members of the Agricultural Education Teacher Educator Staff at Kansas State University. This included three staff members of the Department of Adult and Occupational Education of the College of Education and two staff members of the Department of Agricultural Engineering.

### III. DEFINITIONS OF TERMS USED

Most of the terms used in the report of this study were terms which were, in the opinion of the writer, commonly used and understood by vo-ag teachers, agricultural education teacher educators, and vo-ag supervisory personnel. However, for the sake of the clarity of this report, it was decided by the writer that the following key terms should be defined.

Practicability. Practicability was interpreted as meaning that the various sections of the Record Book were of such nature that vo-ag students could keep complete and accurate records without excessive demands on the use of class time and vo-ag teacher assistance. Excessive was interpreted as meaning that a disproportionate amount of class time and teacher assistance was required in relation to the practical values attained. Also, practicability was interpreted as meaning that the various sections of the Record Book contained data that were usable and necessary in the keeping of complete and accurate records for vo-ag students and for the majority of the vo-ag graduates who became farmers.

Vocational agriculture. Throughout the report of this study, the term "vocational agriculture" was interpreted as meaning vocational education in agriculture which was a part of a nation-wide, federally aided

program of systematic instruction in agriculture, ag-related occupations, and agricultural mechanics of less than college grade conducted in the public high schools for those persons over fourteen years of age. The enrollees had entered upon or were preparing to enter upon the work of the farm or an ag-related occupation. This instruction was offered under a plan of cooperation between the Vocational and Technical Division of the State Department of Public Instruction of Kansas and the United States Office of Education. The instruction was given by qualified teachers of vocational agriculture who were employed on an eleven-month basis so as to follow up their instruction throughout the year by supervising the farming operations and ag-related occupational experiences of their students.

Farming program. The farming programs were made up of productive projects, improvement projects, and supplementary farm practices. These programs were carried on as an integral part of the instruction under the guidance and supervision of the teacher of vocational agriculture.

Ag-related occupational experiences. Learning programs whereby students gained work experience in occupational areas related to farming in lieu of, or in addition to, the maintenance of a farming program. These occupational areas were designated by United States Office of Education agricultural occupational category numbers. (These were not the Dictionary of Occupational Titles numbers)

Agricultural mechanics. The agricultural mechanics activities covered a broad field of training in such areas as: (1) farm welding; (2) farm carpentry and concrete; (3) farm electrification; (4) soil conservation; (5) farm power and machinery; and (6) farm shop tools.

Future Farmers of America. The Future Farmers of America was the national organization of, by, and for boys and girls studying vocational

agriculture and was an integral part of the program of vocational agriculture.

Kansas Vocational Agriculture Record Book. The general content and the purpose of the Record Book have been explained on the first page of this chapter. The Record Book contained provisions for the recording of forty-three different types of F.F.A., supervised program, and personal records. Since it was assumed by the writer that the persons who have been involved in the vocational agriculture programs in Kansas had a degree of familiarity with the various sections in the Record Book, an attempt was not made to define each section.

Teacher educator. The term "teacher educator" was interpreted as indicating a person who was employed to teach the courses offered in Agricultural Education and Agricultural Mechanics by the College of Education's Department of Adult and Occupational Education and the College of Engineering's Department of Agricultural Engineering at Kansas State University. This included the instruction given to the first and second year Agricultural Education graduates and to persons studying for advanced degrees in that field.

State supervisory staff members. These persons were members of the staff of the Vocational and Technical Education Division of the State Department of Public Instruction who were specifically responsible for the direction and supervision of vocational agriculture in Kansas.

## CHAPTER II

### REVIEW OF THE LITERATURE

A survey of literature was made at the Kansas State University library, through the ERIC Clearinghouse on Vocational and Technical Education, and in the McPherson Senior High School vocational agriculture department. It was observed that accurate and complete record keeping had been emphasized by educators and farm management specialists as being one of the most important functions that were performed by the successful farm operators.

In an effort to fulfill the objectives of the study, the review of literature was divided into the following categories: (1) Literature on the importance of farm records; (2) Literature on useful farm records; (3) comparison of record books used in several states; and (4) Literature on improvement of farm records.

#### I. LITERATURE ON THE IMPORTANCE OF FARM RECORDS

Successful farming was not only a matter of increasing productivity--of growing two bushels of wheat where one grew before--but of doing it efficiently, as a business would. The successful farmer of the day was not the weathered character out of a Norman Rockwell painting who could look at the sky and predict rainfall for the county; he was a manager, a businessman. The men of the day who successfully worked a living out of the soil would have been just as successful as owners of small industries; the same kind of acumen was required in farming as in industry.<sup>1</sup>

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<sup>1</sup>A. Webster Tenney, "This Farming Business," American Education, 2:28-32, July-August, 1966.

No one would have seriously questioned the desirability--or the necessity--for students of vo-ag to keep some kind of records of their farming programs. Many disagreed as to the specific purposes which such records should have served and the exact types of records which should have been kept. Records should have served two purposes: (1) to enable the student to know the results of his work and the degrees of success achieved; and (2) as a means of teaching good practices and some very important concepts.<sup>2</sup>

The Vocational Agriculture Supervised Practice Plans and Records--the North Carolina record book--contained the following list of purposes for the supervised practice record book:<sup>3</sup>

Primary Purposes:

Serves as a guide for occupational planning analysis and choice.

Provides a basis for evaluation of learning, accomplishments, and replanning.

Contributory Purposes:

Aids in determining financial progress and student's net worth.

Serves as a record of agreement between all persons concerned.

Promotes the development of attitudes of "planfulness".

Aids in developing knowledge of the "planning process".

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<sup>2</sup>John A. Snell, "Record Keeping--Chore or Opportunity," Agricultural Education, 29:195 and 199, March 1957.

<sup>3</sup>"Purposes of the Supervised Practice Record Book," Agricultural Education, 38:190, February, 1966.

Aids in developing record keeping abilities and skills.

Provides a means for cooperative planning and evaluation.

Aids in self appraisal of vocational objectives.

Large investments coupled with closer margins between cost of production and selling price made it necessary for the farmer to know more about his business if he was to allocate resources in order to get optimum return from the capital and labor invested.<sup>4</sup>

Finding the strong and weak points was a major step toward bringing about improvement of any business. Knowing where the farm stood in relation to other farms did not give the details of exactly what should have been done to bring about improvement. However, a person who was thoroughly familiar with the farm's operation usually had a good idea of the changes likely needed for improvement if he was able to tell just where the weak points existed. Record analysis made it possible for a farmer to improve his business.<sup>5</sup>

The large differences in income that existed between farms in Kansas had to be attributed partly to differences in management. The farm operator needed to become well acquainted with his farm records and needed to use them to get the facts needed for decisions and to analyze and control his business costs. The farmer's pencil might have been the

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<sup>4</sup>Homer E. Brown and John T. Starling, "Adult Farmer Instruction in Farm Business Planning and Analysis," Agricultural Education, 41:34-5, August, 1968.

<sup>5</sup>Setting Up Farm Records to Provide for Analysis, (Urbana: College of Agriculture, Illinois University, Report Number UI-VAS-2037, 1963).

most valuable tool on the farm.<sup>6</sup>

For the individual farmer, accounting systems served four basic functions:<sup>7</sup>

1. Control of financial affairs. This involved recording monies received and paid out, accounts payable and receivable, and the status of inventories.
2. Satisfying legal and institutional requirements involving income and social security taxes, estate settlements, insurance claims, and others.
3. Farm business analysis.
4. Forward planning and budgeting.

## II. LITERATURE ON USEFUL FARM RECORDS

Each farmer should select a farm record-keeping system that best serves his needs. Bookkeeping is to accounting something like arithmetic is to mathematics. In order to get the accounting, (mathematical) solution, the bookkeeping (arithmetic) must be performed.<sup>8</sup>

Farmers should keep complete records, including all the information any businessman would need in making decisions, short of a breakdown for cost accounting. At the end of the year the records should provide information for income tax returns, labor income per farm, labor income per enterprise, percentage made on capital, price received per unit for products sold, profit per enterprise, and economic efficiency. The records should also provide the data to determine the relationship

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<sup>6</sup>Victor E. Jacobs, This Business of Farming, (Manhattan: Extension Service, Kansas State University, Publication MF-132, March, 1964).

<sup>7</sup>D. F. Wilken, "These Ideas Will Help Set Up a Farm Record Keeping System," Kansas Farmer, 106-6:22, March, 1969.

<sup>8</sup>Ibid.

of labor income to size, volume, and output.<sup>9</sup>

The farming program record book should provide space for the keeping of records that will enable the student to measure his progress toward production standards and goals. This type of records included such things as feed efficiency, litter weight at birth and weaning age, cost per bushel of grain produced, and etc.<sup>10</sup>

The types of records kept should not only provide needed information for the student and teacher but should have carry-over value to genuine farm records and accounts. Some key points that should be kept in mind if these conditions are to be met are:<sup>11</sup>

1. Only records that are useful should be kept.
2. To be useful, records must be complete and accurate.
3. The records should be as simple as possible.
4. The records should resemble as closely as possible the corresponding records which farmers should keep.

The University of Illinois College of Agriculture in its Report Number UI-VAS-2037 suggests that analysis records of the following kinds are needed in a farm account book:<sup>12</sup>

- I. Efficiency of Crop Production
  - A. Yield per acre
  - B. Total production
  - C. Total number of acres
  - D. An inventory at the end of the year

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<sup>9</sup>Tenney, Loc. cit.

<sup>10</sup>Lloyd J. Phipps, "Continuous Record Analysis," Agricultural Education, 32:8-9, July, 1959.

<sup>11</sup>Snell, Loc. cit.

<sup>12</sup>Setting Up Farm Records to Provide for Analysis, (Urbana: College of Agriculture, Illinois University, Report Number UI-VAS-2037, 1963).



- II. Efficiency of Livestock Production.
  - A. Returns per 100 dollars worth of feed fed
    - 1. Returns from each livestock enterprise
    - 2. Feed fed to each kind of livestock
  - B. Feed fed per 100 pounds of gain
    - 1. Pounds of feed fed to each kind of livestock
    - 2. Total weight of livestock or livestock product produced during the year
    - 3. Weights of animals at beginning and ending inventories, weights of animals purchased, weights of animals sold and/or died, and amount of products used in the home must also be recorded.
- III. Costs per Tillable Acre.
  - A. Machinery cost per acre
  - B. Labor cost per tillable acre
- IV. Volume of Business.
  - A. In bushels, pounds of animals, and other similar items
  - B. Value of production per man
- V. Net Farm Income (Farm Earnings).
  - A. From his labor
  - B. From his management
  - C. From his capital investment
- VI. Inventories and Depreciation Schedules.
  - A. Beginning inventory
  - B. Purchases
  - C. Sales
  - D. Ending inventory
- VII. Feed Records for Each Kind of Livestock.
- VIII. Crop Production Records.
- IX. Livestock Production Records. (Weights at various ages, rate of gain, breeding records, and loss records. Egg records, milk records, and livestock products used in the home records)

The kinds of records that a student kept should have been determined by his needs. Needs may change; therefore, the kinds of records may have to be changed. The soundest choice of the kind of record that should have been used to meet a need was improved by an increase in the understanding of records. Wise selection was dependent upon a knowledge of records. The kinds of records usually needed in a vo-ag record book, as reported by Duncan and Toben,<sup>13</sup> were as follows:

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<sup>13</sup>A. O. Duncan and George E. Toben, A Guide on Record Keeping and Analysis in the Vo-Ag Record Book for Production Agriculture, (Athens: Georgia University, March, 1966).

1. Inventory Records (Assets and Liabilities).

2. Cash Records (Expenses and Receipts).

Data processing record keeping services were being offered to the farmers of Kansas by several companies. In reviewing the report of Curtis<sup>14</sup> it was evident that farmers in Pennsylvania were receiving assistance in record keeping and analysis with an aim toward the development of an electronic farm accounting system. After a farmer had kept complete farm records for a year, (as a member of an Ohio vo-ag class in Farm Business Planning and Analysis) a summary of his records was sent to Ohio State University for computer analysis. As a result the strengths and weaknesses of each farm business were determined.<sup>15</sup> These two states, and probably others, were directing their farm record keeping training toward the use of the computer for analysis.

### III. COMPARISON OF RECORD BOOKS USED IN SEVERAL STATES

It was observed through the study of the literature that several states in the eastern part of the United States were using either the Vocational Agriculture Record Book for Production Agriculture which was published by French-Bray Printing Co. or a book very similar to it. This farming program record book varied from the Kansas Record Book in several respects. One difference noted was that the expenses and receipts pages had numbered columns without headings. The student was to place headings in these columns as needed.

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<sup>14</sup>Samuel M. Curtis, "Summer Assistance for Adult Farmers," Agricultural Education, 37:304-6, June, 1965.

<sup>15</sup>Brown and Starling, Loc. cit.

Specifically, the Vocational Agriculture Record Book for Production Agriculture provided space for the following:<sup>16</sup>

1. Name, address, school, and social security number on the front cover.
2. A list of enterprises for which the record book was kept.
3. Agreement.
4. Inventory of crops, feed, seeds, and supplies.
5. Inventory of livestock and poultry held for sale and home use.
6. Inventory of permanent improvements, machinery, and equipment.
7. Inventory of livestock held for breeding and dairy purposes.
8. Operating and capital expenses (cash and exchange).
9. Income from capital and non-capital items (cash and exchange).
10. Summary of year's business.
11. Production of feed raised that year.
12. Disposal of feed that was on hand and raised that year.
13. Analysis by enterprise.
14. Special conditions affecting income from different enterprises.
15. Total agricultural and non-agricultural earnings.
16. Total student's net income.
17. Student's financial statement.
18. Important dates and notes.

Extension Service personnel of Kansas State University indicated that a good farm record would show the machinery costs per crop acre, the gross income of the farm, the net worth, and many other measures and needed facts of production and management.<sup>17</sup>

According to Duncan and Toben, exchange records were especially valuable to a student of vocational agriculture because they provided a means of accounting for the contributions both from and to others.<sup>18</sup> The Kansas Record Book did not provide a space specifically for this purpose.

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<sup>16</sup>Vocational Agriculture Record Book for Production Agriculture, (Baltimore: French-Bray Printing Company, 1966).

<sup>17</sup>John R. Schlender, Kenneth L. McReynolds, and Frank Overley, Keeping Farm Records With the Kansas Farm and Household Account Book, Publication Number MF-142 Revised, (Manhattan: Extension Service, Kansas State University, February, 1968).

<sup>18</sup>Duncan and Toben, Loc. cit.

Cooperative ag-related occupations training was becoming an important part of the vocational agriculture curriculum. Martin and others<sup>19</sup> indicated that the record book for this type of instruction should have provided spaces for:

1. Plans for getting started in an agricultural career.
2. Where I work.
3. My work experience program--plans.
4. Summary of farm and home improvements projects.
5. Placement agreement.
6. Record of work experience and wages.
7. Annual summary of hours worked and cash earned.
8. Record and summary of non-cash earnings from work experience.
9. My financial statement.
10. Leadership and cooperative activities.
11. Record of visits and conferences.
12. Teacher's record of students on placement.

It was noted that the Kansas Record Book was not designed to meet the needs of the student who was involved in cooperative ag-related occupations training.

#### IV. LITERATURE ON IMPROVEMENT OF FARM RECORDS

If vo-ag farming program records in Kansas were to be improved, it appeared to the writer that the students and teachers needed additional motivation and help and/or a more practicable record book.

Many students looked upon record keeping as a tedious and uninteresting chore to get through as easily and painlessly as possible. However, most students were naturally interested in their own financial success and they had a natural desire to excel at something. Teachers should have "exploited" those interests.<sup>20</sup>

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<sup>19</sup>Howard W. Martin and others, Teacher's Guide for the Effective Use of Records of Supervised Occupational Experience and Training in Vocational Agriculture, (Baltimore: French-Bray Printing Company, 1964).

<sup>20</sup>Snell, Loc. cit.

In a study completed at Iowa State University, Anderson and Bundy<sup>21</sup> found that farmers in Iowa possessed less competence than they felt was needed in each of 43 competencies related to farm credit. A questionnaire was submitted to a random sample of 177 members of the Central Iowa Farm Business Association and 305 random sample farmers from the same 14 county area served by the association. The farmers were asked to rate the degree of competency possessed for each of the 43 items. Ratings were on a five point scale with 5 meaning that very much competency was needed (or possessed) and 1 meaning that no competency was needed (or possessed).

One of the highest overall scores for degree of competence needed by both groups was found to be the ability to keep complete and accurate farm records and to analyze and interpret farm records and results.

When the relationships between the following selected control variables--years of farming experience, educational attainment, farm size, and amount of credit used and gross farm income and degree of competence needed and possessed scores--were studied using correlation analysis, it was found the ability needed to evaluate, analyze, and interpret farm records and accounts and the ability needed to evaluate available credit sources had a correlation coefficient of .59.

That study indicated that the farmers in that area of Iowa saw a need for additional instruction in farm record keeping.

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<sup>21</sup>Ober U. Anderson and Clarence E. Bundy, "What Competencies in Farm Credit Needed by Farmers?", Agricultural Education, 39:90-1+, October, 1966.

In a similar study conducted in Iowa by Christy,<sup>22</sup> it was concluded that: (1) educational agencies must give instruction in record keeping and analysis high priority; (2) teachers must become adequately prepared in order to assume their responsibility in providing instruction in the area of farm business record keeping and analysis; (3) educators must work closely with the computer services and establish a role as an educator; (4) there will be a big need to interpret to the farmer what has been analyzed on the computer; and (5) there will be a need to develop programs for vocational agriculture groups based on the needs of farmers who will be using the computer services.

In another study conducted in Iowa by Hickman,<sup>23</sup> the educational implications of the results and the recommendations made were as follows: (1) instruction in farm management, accounting, and record analysis was greatly needed by both present and prospective farmers; (2) vocational agriculture could capably provide such instruction and training, and should increase emphasis upon management and decision-making in both the day-school program and out-of-school adult and young farmer groups; and (3) all educational institutions and agencies should endeavor to motivate farm managers to keep and use better business records as decision-making tools.

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<sup>22</sup>James R. Christy, Competencies in Farm Business Analysis Needed by Farmers, Ag. Ed. Research Publication No. 18, Iowa State University, Ames, 1966.

<sup>23</sup>Ray D. Hickman, Farm Business Record and Analysis Systems of Iowa Farm Operators, Ag. Ed. Research Publication No. 27, Iowa State University, Ames, 1967.

McCormick<sup>24</sup> suggested the training of selected teachers of vocational agriculture to become district farm management specialists to aid the vo-ag teachers in farm accounting, summaries and analyses, enterprise analysis, and methods of teaching farm business analysis.

Phipps<sup>25</sup> wrote that the frequent or continuous use of records to measure progress toward standards and goals was the key to success in obtaining good records. It was the key to success in obtaining an appreciation of the value of the mechanics of record keeping. It also provided the motivation needed by many individuals for learning the skills involved in record keeping.

The ideal was the use of records almost continuously to evaluate progress. A practical, attainable goal might have been the use of records at least once a week throughout the year for the purpose of evaluating progress. If teachers would have promoted the use of records at least weekly to measure progress, the students, no doubt, would have found increasing interest in records and record keeping during the year, instead of decreasing interest.<sup>26</sup>

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<sup>24</sup>Floyd McCormick, "Strengthen Farm Management," Agricultural Education, 38:35, August, 1965.

<sup>25</sup>Lloyd J. Phipps, "Continuous Record Analysis," Agricultural Education, 32:8-9, July, 1959.

<sup>26</sup>Ibid.

## CHAPTER III

### DESIGN AND PROCEDURE

#### I. THE RESEARCH DESIGN

The research design of Part I of the study (See Opinionnaire, Appendix I) was of the descriptive-survey study type. An effort was made to determine the practicability (usefulness) of the various parts of the Record Book to the vo-ag student. An effort was also made to determine the practicability of the record keeping training that was afforded through the use of the various parts of the Record Book to the vo-ag graduate who became engaged in farming. In addition, an effort was made to determine if the various parts of the Record Book were in need of revision or deletion. The determinations were based on the opinions of the vo-ag teachers, teacher educators, and state supervisory staff.

The research design of Part II of the study (See Opinionnaire, Appendix I) was of the descriptive-survey study type. An attempt was made to discover or clarify relationships of the opinions that the vo-ag teachers in Kansas had regarding the Record Book. The relationships were based on years of vo-ag teaching experience, average number of students per year that the teachers assisted in the closing-out of account books (pupil load), institution from which their Bachelor of Science Degree was granted, and geographical location of the teachers' vo-ag departments in the state. Additional miscellaneous questions were asked to help determine if there was a need for a revision of the Record Book. Opinions of the state supervisory staff and the teacher educators were gathered on those questions that were applicable.



## II. THE SAMPLE

Vo-ag teachers. There were 180 vo-ag teachers teaching in the 165 vo-ag departments in the public secondary schools in Kansas. The state supervisor of vocational agriculture published a 1969-70 list of the vo-ag departments in Kansas and the name of the teacher (or teachers) in those departments. The writer numbered the departments on the list in consecutive order. The numbers "1", "2", and "3" were written on separate pieces of paper and placed in a container for a "drawing". The number "3" was drawn by a person who was not involved in the study. Each teacher in each department whose department number on the afore mentioned list was divisible by three was sent an opinionnaire. Thus, opinionnaires were sent to sixty-one teachers in fifty-five of the vo-ag departments in Kansas. The vo-ag teachers were asked to answer the questions in both Part I and Part II of the opinionnaire.

Teacher educators. Each of the five persons on the vo-ag teacher educator staff of Kansas State University was sent an opinionnaire. These staff members were asked to answer all of the questions in Part I and questions nine, eleven, thirteen, fourteen, and fifteen in Part II of the opinionnaire.

State supervisory staff. Each of the three members of this group was sent an opinionnaire. These people were asked to answer all of the questions in Part I and questions nine, eleven, thirteen, fourteen, and fifteen in Part II of the opinionnaire.

## III. THE MEASURING DEVICE

Part I of the opinionnaire was of the descriptive rating scale type and contained closed form questions. The questions in Part II of the

opinionnaire were also of the closed form type.

Appendix I contains a copy of the opinionnaire that was used.

#### IV. THE METHOD OF GATHERING DATA

A letter of transmittal, an opinionnaire, and a self-addressed, stamped envelope were sent to each member of the sample.

The respondents were identified by a numbering system used on the opinionnaires. Those persons who had not responded within two weeks after the date of the first mailing were sent a follow-up letter along with another copy of the opinionnaire and another self-addressed stamped envelope. Those who were sent follow-up letters were also contacted by telephone.

#### V. THE METHOD OF PRESENTING DATA

The data acquired were analyzed and discussed in narrative form as well as being presented in table form.

#### VI. METHOD OF ANALYSIS

Part I. The data acquired from this portion of the opinionnaire were analyzed to determine the arithmetic mean of the scores of each item for each sample group in an effort to determine the opinions of the sample groups as to the usefulness of each of these items in the Record Book. Comparisons were made between the sample groups.

Part II. The data acquired from this portion of the opinionnaire were analyzed by the use of frequency data, cumulative percentages, and arithmetic means.

Frequency data were used to quantitatively classify the vo-ag teachers in an effort to discover or clarify the relationships of the opinions that

the vo-ag teachers had regarding the Record Book based on years of vo-ag teaching experience, pupil load, geographical location in the state, and institution from which their Bachelor of Science Degree was granted. The categories established were compared on the basis of the arithmetic mean of the scores given each item in the Record Book by the vo-ag teachers in those categories.

The data acquired from those questions of a miscellaneous nature in Part II of the opinionnaire were analyzed by the use of frequency data and cumulative percentages for each sample group which was asked to respond to those questions. This was done to determine the opinions of the sample groups, to make comparisons between the sample groups, and to determine the characteristics of the vo-ag teacher sample as related to the population of vo-ag teachers in Kansas.

Due to the small size of two of the groups involved in the study as compared to the size of the vo-ag teacher sample, the author was advised by a statistician on the staff of the College of Education at Kansas State University not to attempt more complicated statistical analysis methods as they would probably not produce valid findings.

## CHAPTER IV

### THE FINDINGS

#### I. CHARACTERISTICS OF GROUPS SURVEYED

This chapter was concerned with the interpretation of the data collected from the three groups included in the study. Opinionnaires were sent to a random sample of vo-ag teachers which included sixty-one of the vo-ag teachers in Kansas. Opinionnaires were also sent to the three members of the state vo-ag supervisory staff in Topeka and to the five members of the vo-ag teacher educator staff at Kansas State University. Thus, a total of sixty-nine opinionnaires were mailed. Opinionnaires were returned by one hundred per cent of the persons included in the study.

The vo-ag teachers selected for the study were selected by the random method described in Chapter III. Data concerning the sample and how the sample compared with the total population of vo-ag teachers in Kansas was presented in Table I. The study included 61 of the 180 vo-ag teachers in Kansas. The average length of teaching experience for the sample group was 9.87 years as compared to approximately 11.0 years for the entire population. The range in years of teaching experience for the sample was from a low of one-half year to a high of 40 years. This compared with a range of from one-half year to 40 years for the population. The sample was well distributed geographically throughout the state with the possible exception of the southeast F.F.A. district. Of the fourteen multiple teacher departments in the state, five were represented. The sample included 45 teachers who had earned their Bachelor of Science Degree at Kansas State University and 16

TABLE I  
VO-AG TEACHER SAMPLE AND POPULATION DATA

	Sample	Population
Total Teachers	61	180
Years Vo-Ag Teaching Experience		
Mean	9.87	11 (approx.)
Range in Years	$\frac{1}{2}$ to 40	$\frac{1}{2}$ to 40
Geographical Location in State		
N.E. F.F.A. District	8 (13.1%)	18 (10%)
E.C. F.F.A. District	10 (16.4%)	24 (13.3%)
S.E. F.F.A. District	4 (6.5%)	26 (14.4%)
S.C. F.F.A. District	12 (19.7%)	29 (16.1%)
S.W. F.F.A. District	8 (13.1%)	19 (10.6%)
N.W. F.F.A. District	11 (18%)	32 (17.8%)
N.C. F.F.A. District	8 (13.1%)	32 (17.8%)
Multiple Teacher Departments Represented	5	14
Institution Granting B. S. Degree		
Kansas State University	45	132
Institutions in Other States	16	48

teachers who had earned this degree at institutions in other states. This compared with the data for the entire population of vo-ag teachers in Kansas which showed that 132 teachers earned their Bachelor of Science Degree at Kansas State University and 48 at institutions outside of the state. Of the 16 members of the sample who had been awarded the Bachelor of Science Degree at institutions in other states, 11 of the degrees were awarded at Oklahoma State University, 1 in Arkansas, 1 in Wyoming, 1 in Missouri, and 2 in Colorado.

Since the Kansas State University vo-ag teacher educator staff members and the state supervisory staff members included in the study represented the entire population of those respective groups, data concerning those groups similar to that given for the vo-ag teachers were not deemed to be necessary.

## II. OPINIONNAIRE PART I DATA

To accomplish the objective of this study as presented in Chapter I, emphasis was given to the interpretation of data from each of the three groups included in the study. Part I of the opinionnaire (a copy of which is in the Appendix of this report) listed forty-three items which were included in the Kansas Vocational Agriculture Record Book. Each recipient of an opinionnaire was asked to rate each of the items as to their usefulness to the vo-ag student while enrolled in vocational agriculture and as to the usefulness of that kind of record keeping training to the student who became engaged in farming after graduation from high school. The rating scale ranged from a low of 0 to a high of 4. A score of 0 indicated that the item, in the opinion of the respondent, was not useful, should be deleted from the Record Book, and

contained records that had little or no value to the vo-ag student and/or farmer. A score of 1 indicated that the respondent felt that the item was somewhat useful, could be deleted from the Record Book, contained records of only minor importance to the student and/or farmer, and, if retained, the form of the record should be modified. A score of 2 indicated that the item was thought to be useful by the respondent, should probably be retained in the Record Book, contained records that should be of value to the student and/or farmer, and the form of the record should be modified. A rating of 3 by the respondent indicated that he felt the item was definitely useful, should be retained in the Record Book, contained records that were of definite value to the student and/or farmer, and the form of the record possibly could be modified. A rating of 4 signified that, in the opinion of the respondent, the item was very highly useful, must be retained in the Record Book, contained records that were very important to the student and/or farmer, and the form of the record item was satisfactory.

The data analyzed for Part I, Column A of the opinionnaire were presented in detail in Tables II, III, IV, V, VI, and VII. The data analyzed for Part I, Column B of the opinionnaire were presented in Tables VIII, IX, and X. The data were analyzed by the use of means, percentages, and score ranges. Due to the small size of two of the groups involved in the study, the author was advised not to attempt more complicated statistical analysis methods as they would probably not be valid.

The mean rating score data on the usefulness of the Record Book for vo-ag students in the opinion of each of the three groups in the study and the mean rating scores of the three groups combined were given in Table II. A mean rating score of 0 to .5 indicated that that part of the Record Book

TABLE II

MEAN RATING SCORE DATA  
ON USEFULNESS OF RECORD BOOK FOR VO-AG STUDENTS

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
1. F.F.A. Leadership Record	2.70	2.67	3.00	2.79
2. Supervised Program	2.43	2.67	2.80	2.63
3. Farming Program Pictures and Clippings	1.93	2.00	2.00	1.98
4. Diary	2.13	1.33	2.40	1.84
5. Farming Program Agreement	3.21	3.00	3.60	3.27
6. Classification of Receipts	3.44	3.33	3.40	3.39
7. Receipts	3.72	3.33	4.00	3.68
8. Classification of Expenses	3.43	3.33	3.40	3.39
9. Expenses	3.72	3.33	4.00	3.68
10. Depreciation Schedule	2.80	2.00	3.80	2.87
11. Inventory of Grains and Feeds--Seeds and Supplies--Poultry	3.18	2.00	3.80	2.97
12. Inventory of Livestock	3.51	3.00	3.80	3.44
13. Inventory of Farm Receivables	3.48	2.00	3.60	3.03



TABLE II (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
14. Inventory of Farm Payables	3.48	2.33	3.60	3.14
15. Net Farm Income Computed on Accrual Basis	2.36	2.00	3.20	2.52
16. Schedule of Farm Income and Expenses Computed by the Cash Method	3.33	2.33	3.40	3.02
17. Net Worth Statement	3.61	2.67	3.40	3.23
18. Progress Report	2.79	2.33	2.20	2.44
19. End-of-Year Accuracy Check	3.21	2.67	3.60	3.16
20. Livestock Analysis	3.33	2.33	3.20	2.95
21. Livestock Breeding, Production and Mortality Record				
(a) Cattle Record	3.28	2.33	3.00	2.87
(b) Sheep Flock Record	3.11	2.33	2.80	2.75
(c) Poultry Record	2.79	2.33	2.40	2.51
(d) Swine Record	3.33	2.33	2.80	2.82
22. Dairy Herd Production Record	2.95	2.00	2.60	2.52
23. Egg Production	2.61	2.00	2.20	2.27

TABLE II (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
24. Livestock Mortality	3.18	2.00	2.80	2.66
25. Farm Products Used at Home	2.48	1.00	2.40	1.96
26. Livestock Production Record				
(a) Sheep	3.15	2.00	2.80	2.65
(b) Poultry	3.00	2.00	2.60	2.53
(c) Cattle	3.20	2.00	3.00	2.73
(d) Hogs	3.20	2.00	3.00	2.73
27. Livestock Feed and Labor Record	2.75	2.33	2.40	2.49
28. Map of Land Operated	1.89	1.67	1.60	1.72
29. Crop Record				
(a) Crop Production Record	3.20	2.33	3.00	2.84
(b) Operation	2.87	2.00	2.80	2.56
(c) Crop Analysis	3.16	2.00	2.80	2.65
(d) Practice	2.82	2.00	2.80	2.54
(e) Supply and Disposal	3.00	1.67	2.60	2.42

TABLE II (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
30. Inventory of Personal Goods	2.05	1.67	2.00	1.91
31. Personal Expenditures	2.64	2.00	3.00	2.55
32. Plans for Long Time Farming Program	2.20	2.00	2.40	2.20
33. Gestation Table	3.31	2.33	2.80	2.81
Mean Scores for Entire Record Book	2.98	2.26	2.95	2.73

## Practicability (Usefulness) Rating Scale

.00- .50 Not Useful  
 .51 - 1.50 Somewhat Useful  
 1.51 - 2.50 Useful  
 2.51 - 3.50 Definitely Useful  
 3.51 - 4.00 Very Highly Useful

was not useful. A mean rating score of .51 to 1.50 indicated that the part was somewhat useful. A mean rating score of 1.51 to 2.50 indicated that the item was useful. A mean rating score of 2.51 to 3.50 indicated that the item was definitely useful. A mean rating score of 3.51 to 4.00 indicated that the item was very highly useful.

Usefulness to the vo-ag student. The data in Table II showed that the vo-ag teachers rated eight of the items in the useful range, thirty-one of the items in the definitely useful range, and four of the items in the very highly useful range. The lowest rating by the vo-ag teachers was a mean rating score of 1.93 for the Farming Program Pictures and Clippings section. The highest rating by the vo-ag teachers was a mean rating score of 3.72 for both the Receipts and the Expenses pages. Thus, the vo-ag teachers indicated that all items in the book should be retained with eight of them needing modification and another thirty-one possibly needing modification. Four items were definitely satisfactory in their existent form.

The data from Table II indicated that the state supervisory staff rated two items in the somewhat useful range, thirty-one items in the useful range, and ten items in the definitely useful range. This group did not rate any items in the not useful and the very highly useful range. The lowest rating by the state staff was a mean rating score of 1.00 for the Farm Products Used at Home section. This group's highest rating was a 3.33 mean rating score for the Classification of Receipts, Receipts, Classification of Expenses, and Expenses sections of the Record Book. The state supervisory staff thus indicated that two sections of the Record Book should be deleted or modified, thirty-one sections should be retained but modified, and ten of the sections should be retained and possibly modified.

The Kansas State University vo-ag teacher educator staff data which were presented in Table II indicated that they rated ten sections in the useful range, twenty-six sections in the definitely useful range, and seven sections in the very highly useful range. This group did not rate any sections in the not useful and the somewhat useful ranges. The lowest rating by the Kansas State University vo-ag teacher educator staff was a 1.60 rating score for the Map of Land Operated section. The highest mean rating score by this group was a 4.00 for the Receipts and the Expenses sections of the Record Book. Thus, the Kansas State University staff indicated that ten sections should be retained but modified, twenty-six sections should be retained and possibly modified, and seven sections should be retained without modification.

The mean rating scores for the entire Record Book which were given in Table II showed that the vo-ag teachers rated the book 2.98, the state supervisory staff 2.26, and the Kansas State University vo-ag teacher educator staff 2.95. It appeared that the vo-ag teachers and the group from Kansas State University had similar overall opinions concerning the Record Book and that the state supervisory staff had a lesser opinion of the practicability of the Record Book.

The combined mean rating score of the mean rating scores of the three groups surveyed was presented in Table II. The opinion of all three groups combined was that ten sections of the Record Book were useful, thirty-one sections were definitely useful, and two sections were very highly useful.

The data in Table IV showed the mean total rating scores, the range of the total rating scores, and the mean rating scale scores for Part I, Column A for each of the groups in the study. The lowest and highest total of rating scores were made by vo-ag teachers. One vo-ag teacher rated the

book at a total score of 66 and another teacher rated the book at a total score of 172. The highest possible total score was 172.

Usefulness to vo-ag graduates who became farmers. In an effort to fulfill the objectives of this study, opinions of the three groups included in the study concerning the usefulness of the record keeping training to those vo-ag students who became engaged in farming after graduation from high school were obtained through the rating scores given by the respondents in Part I, Column B of the opinionnaire. These data were presented in Table III.

A mean rating score of 0.00 to .50 would have indicated that, in the opinion of the respondents, the training was not useful and had little or no value to the student who became engaged in farming after graduation from high school. A mean rating score of .51 to 1.50 would have indicated that the training was somewhat useful and would have had only minor value to the student who became engaged in farming after high school graduation. A mean rating score of 1.51 to 2.50 indicated that the training was useful and should have been of value to the farmer. A mean rating score of 2.51 to 3.50 signified that the training was definitely useful and had definite value to the farmer. A mean rating score of 3.51 to 4.00 was an indication that the respondents felt that kind of record keeping training was very definitely useful and had very important value to the vo-ag graduate who became engaged in farming.

The vo-ag teachers rated the value of the training in three sections of the Record Book in the somewhat useful range, seven sections in the useful range, twenty-seven sections in the definitely useful range, and six sections in the very highly useful range. The three lowest mean rating scores were for sections or parts of the Record Book which dealt with records of

TABLE III

MEAN RATING SCORE DATA ON USEFULNESS OF  
RECORD KEEPING TRAINING TO VO-AG STUDENTS WHO BECAME FARMERS

Record Book Parts	Mean Rating Scores		
	Vo-Ag Teachers	State Staff	K.S.U. Staff Groups Combined
1. F.F.A. Leadership Record	.53	.33	1.40 .75
2. Supervised Program	1.17	.33	2.00 1.17
3. Farming Program Pictures and Clippings	.87	.33	1.40 .87
4. Diary	1.80	.67	1.60 1.36
5. Farming Program Agreement	2.92	2.00	1.80 2.24
6. Classification of Receipts	3.33	3.33	3.40 3.35
7. Receipts	3.73	3.33	3.80 3.62
8. Classification of Expenses	3.35	3.33	3.40 3.36
9. Expenses	3.75	3.33	3.80 3.63
10. Depreciation Schedule	3.25	3.67	4.00 3.64
11. Inventory of Grains and Feeds--Seeds and Supplies--Poultry	3.22	2.67	4.00 3.26
12. Inventory of Livestock	3.47	3.33	3.60 3.47

TABLE III (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
13. Inventory of Farm Receivables	3.55	3.67	4.00	3.74
14. Inventory of Farm Payables	3.55	3.67	4.00	3.74
15. Net Farm Income Computed on Accrual Basis	2.38	3.00	3.40	2.93
16. Schedule of Farm Income and Expenses Computed by the Cash Method	3.23	3.67	3.80	3.57
17. Net Worth Statement	3.40	3.00	3.80	3.40
18. Progress Report	2.58	2.67	2.20	2.48
19. End-of-Year Accuracy Check	3.02	3.00	3.60	3.21
20. Livestock Analysis	3.37	3.67	3.00	3.35
21. Livestock Breeding, Production and Mortality Record				
(a) Cattle Record	3.10	3.67	3.40	3.39
(b) Sheep Flock Record	3.92	3.67	3.20	3.60
(c) Poultry Record	2.75	3.67	3.00	3.14
(d) Swine Record	3.18	3.67	3.40	3.42
22. Dairy Herd Production Record	2.88	3.67	2.80	3.12



TABLE III (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
23. Egg Production	2.68	3.67	2.60	2.98
24. Livestock Mortality	3.08	3.33	2.80	3.07
25. Farm Products Used at Home	2.38	2.00	2.40	2.26
26. Livestock Production Record				
(a) Sheep	3.07	3.33	3.00	3.13
(b) Poultry	3.90	3.33	2.80	3.34
(c) Cattle	3.12	3.33	3.00	3.15
(d) Hogs	3.12	3.33	3.00	3.15
27. Livestock Feed and Labor Record	2.50	3.67	2.60	2.92
28. Map of Land Operated	1.93	2.00	2.20	2.04
29. Crop Record				
(a) Crop Production Record	3.12	3.33	3.40	3.28
(b) Operation	2.82	2.33	3.00	2.72
(c) Crop Analysis	3.15	3.33	3.20	3.23
(d) Practice	2.78	2.67	2.60	2.68
(e) Supply and Disposal	2.95	2.33	2.80	2.69

TABLE III (continued)

Record Book Parts	Mean Rating Scores			
	Vo-Ag Teachers	State Staff	K.S.U. Staff	Groups Combined
30. Inventory of Personal Goods	1.90	1.33	2.00	1.74
31. Personal Expenditures	2.38	2.00	2.80	2.39
32. Plans for Long Time Farming Program	2.63	2.67	2.20	2.50
33. Gestation Table	3.28	2.00	2.60	2.63
Mean Scores for Entire Book	2.82	2.82	2.99	2.88

## Practicability (Usefulness) Rating Scale

.00 - .50 Not Useful  
 .51 - 1.50 Somewhat Useful  
 1.51 - 2.50 Useful  
 2.51 - 3.50 Definitely Useful  
 3.51 - 4.00 Very Highly Useful

information that were of value mainly to the high school student. The lowest mean rating score was .53 on the F.F.A. Leadership page. The highest mean rating score was 3.92 on the Sheep Flock Record. Thus, the vo-ag teachers rated the value of the record keeping training afforded by the use of the Record Book to the vo-ag graduate who became engaged in farming as only of minor value on three parts, as should be of value on seven sections, as of definite value on twenty-seven parts, and as of very important value on six sections of the Record Book.

The state supervisory staff rated the value of the training afforded by three sections of the Record Book in the not useful range, two portions in the somewhat useful range, seven sections in the useful range, nineteen parts in the definitely useful range, and twelve sections in the very definitely useful range. The lowest mean rating score was a .33 on the first three parts of the Record Book, all of which dealt with records which had value mainly to the high school student. The highest mean rating score was 3.67 on twelve of the forty-three parts of the Record Book. The state supervisory staff rated the value of the training as of little or no value on three parts, as of only minor value on two sections, as should be of value on seven items, as of definite value on nineteen parts, and as of very important value on twelve sections of the Record Book.

The vo-ag teacher educator staff at Kansas State University rated the training provided through the use of the Record Book to the vo-ag student who became a farmer after he graduated from high school in two sections in the somewhat useful range, eight parts in the useful range, twenty-three items in the definitely useful range, and ten parts in the very highly useful range. This group, like the vo-ag teacher group, did not rate any part of the Record Book in the not useful range. The lowest mean rating score (1.40)

was given to the F.F.A. Leadership Record page and to the Farming Program Pictures and Clippings page. The highest mean rating score (4.00) was given to the Depreciation Schedule, Inventory of Grains and Feeds--Seeds and Supplies--Poultry, Inventory of Farm Receivables, and Inventory of Farm Payables. Thus, the Kansas State University group rated the value of the training to the vo-ag student who farmed after graduation as of minor value on two parts of the Record Book, as should be of value on eight sections, as of definite value on twenty-three parts, and as of very important value on ten items.

The composite mean rating scores for the entire Record Book on the value of the training that the Record Book provided to the vo-ag graduate who became engaged in farming after graduation were given in Table III. The vo-ag teachers rated the value of the training 2.82, the state supervisory staff 2.82, and the Kansas State University vo-ag teacher educator staff 2.99. All of the composite mean scores were within the definitely useful range. It appeared to the author that the three groups had similar opinions as to the usefulness of the training provided by the Record Book to those vo-ag students who became engaged in farming after high school graduation.

The groups combined mean rating scores for each item in the Record Book were given in Table III. The opinion of all three groups combined was that four of the sections of the Record Book provided training that was somewhat useful to the vo-ag graduate who became a farmer, seven of the parts provided training that was useful, twenty-five sections provided training that was definitely useful, and seven sections in the Record Book provided training that was very highly useful.

The data in Table IV showed the mean total rating scores, the range of the total rating scores, and the mean rating scale scores for Part I, Column B of the opinionnaire for each of the groups in the study. The lowest

TABLE IV

## DATA ON OPINIONNAIRE PART I RATING SCORE FINDINGS

Item	Vo-Ag Teachers	State Staff	K.S.U. Staff
Part I, Col. A - Usefulness for Vo-Ag Student			
Total of Scores on 43 parts of <u>Record Book</u>			
Mean total rating score	127.93	97.00	126.80
Range of total rating scores			
Low	66.00	90.00	82.00
High	172.00	105.00	148.00
Mean Rating Scale Score	2.98	2.26	2.95
Part I, Col. B. - Usefulness of training to students who became farmers			
Total of Scores on 43 parts of <u>Record Book</u>			
Mean total rating score	121.10	121.33	128.80
Range of total rating scores			
Low	56.00	115.00	94.00
High	169.00	131.00	161.00
Mean Rating Scale Score	2.82	2.82	2.99

and the highest total of rating scores were made by vo-ag teachers. One vo-ag teacher rated the usefulness of the record keeping training at a total score of 56 and another teacher rated the usefulness of the training at 169. The total possible rating score was 172.

Opinions as related to geographical location. It was the author's opinion that, since there was a tendency for the type of farming operations to vary according to the geographical area of the state, the vo-ag teachers' opinions concerning the practicability of the Record Book also varied according to the geographical location of the teachers' departments. Data from

TABLE V

DATA ON VO-AG TEACHERS' RATINGS OF USEFULNESS OF RECORD BOOK  
FOR VO-AG STUDENTS AS AFFECTED BY GEOGRAPHICAL LOCATION  
OF THE TEACHERS' VO-AG DEPARTMENTS

State F.F.A. District	No. of Teachers	Total Score Range		Mean Rating Score Per Part
		Low	High	
Northeast	8	125	172	3.28
East Central	10	113	164	3.24
Southeast	4	66	144	2.70
South Central	12	71	155	2.63
Southwest	8	93	162	3.10
Northwest	11	107	162	3.16
North Central	8	83	154	2.61

Table V indicated that apparently that was not a factor as the teachers, when grouped by F.F.A. districts, all rated the Record Book in the definitely

useful range. The lowest ratings were 2.61 and 2.63 mean rating scores by the teachers in the North Central and the South Central districts respectively. The highest mean rating score (3.28) was given by the teachers in the Northeast district.

Opinions as related to teaching experience. As a part of the research design of the study, an effort was to be made to determine if years of teaching experience had any effect on the opinions the vo-ag teachers had concerning the Record Book. The total rating score range and the mean rating score

TABLE VI

DATA ON VO-AG TEACHERS' RATINGS OF USEFULNESS OF RECORD BOOK  
FOR VO-AG STUDENTS AS AFFECTED BY YEARS OF TEACHING EXPERIENCE

Years Teaching Experience	No. of Teachers	Total Score Range		Mean Rating Score Per Item
		Low	High	
0 - 4	25	87	163	2.90
5 - 9	11	91	155	3.03
10 - 14	10	83	164	2.97
15 - 19	4	71	144	2.73
20 - 24	8	78	172	3.03
25 - 29	1	113	113	2.63
30 - 34	0	---	---	----
35 - 39	1	91	91	2.12
40 - 44	1	148	148	3.44

on a per item basis based on the number of years of teaching experience of the vo-ag teachers was given in Table VI. The responses showed that the

highest mean rating score (3.44) was given by the 40-44 years teaching experience group. There was one teacher in this group. The lowest mean rating score (2.12) was given by the 35-39 years teaching experience group. There was one teacher in this group also. Except for the one teacher in the 35-39 years teaching experience group, all groups rated the Record Book in the definitely useful range. There did not appear, in the opinion of the author, to be any opinion relationship based on years of teaching experience.

Opinions as related to institution granting the Bachelor of Science Degree. As a part of the research design, it was planned that a study would be made to see if any relationship existed between the vo-ag teachers' opinions concerning the usefulness of the Record Book and where the teachers earned their Bachelor of Science Degree. The author had thought that those teachers who were from institutions outside of Kansas would have been introduced to other account books and might have had definite opinions for or against the Record Book. The data on this part of the study were included in Table VII.

The forty-five Kansas State University graduates gave the Record Book a mean rating score of 2.95. The sixteen graduates from institutions outside of Kansas gave it a mean rating score of 3.03. There were eleven of these sixteen out-of-state graduates who had earned their Bachelor of Science Degree at Oklahoma State University. This group gave the Record Book a mean rating score of 2.86. The remaining five out-of-state graduates gave the Record Book a 3.41 mean rating score. Included in this latter group was a vo-ag teacher who rated the Record Book 4.00. The highest possible score was 4.00. Thus, it appeared to the author that there was no relationship between the location of the institution granting the Bachelor of Science Degree and the vo-ag teachers' ratings of the practicability of the Record Book.



TABLE VII

DATA ON VO-AG TEACHERS' RATINGS OF USEFULNESS OF RECORD BOOK  
FOR VO-AG STUDENTS AS AFFECTED BY INSTITUTION GRANTING B. S. DEGREE

Institution Where B. S. Degree Was Granted	No. of Teachers	Total Score Range		Mean Rating Score	
		Low	High	Total Score	Per Part
Kansas State University	45	71	164	127.02	2.95
Institutions Outside State of Kansas					
Total	16	66	172	130.50	3.03
Oklahoma State Univ.	11	66	162	123.09	2.86
Other (Colorado - 2; Arkansas - 1; Wyoming - 1; Missouri - 1)	5	128	172	146.80	3.41

Opinions as related to pupil load. Another part of the research design was to determine if the size of the pupil load had any relationship with the opinions teachers had in regard to the practicability of the Record Book. The teachers were asked to indicate in Part II of the opinionnaire the number of students they helped each year in the closing out of Record Books--this, in the opinion of the author, was the most time consuming and difficult part of the teaching of record keeping in the Record Book. It was noted by observing Table VIII that the only notable difference of opinion that existed was with the teachers who were in the group with the highest pupil load--46 to 60. This group gave the book a 3.26 mean rating score as compared to 2.98 for the entire sample of vo-ag teachers. The vo-ag

TABLE VIII

DATA ON EFFECT OF PUPIL LOAD ON VO-AG TEACHERS' RATING  
OF THE USEFULNESS OF THE RECORD BOOK FOR VO-AG STUDENTS

Pupil Load	No. of Teachers	Total Score Range		Mean Rating Score	
		Low	Range	Total Score	Per Part
15 or less students	6	87	157	125.50	2.92
16 to 30 students	22	66	155	124.00	2.88
31 to 45 students	24	71	164	127.50	2.97
46 to 60 students	9	113	172	140.33	3.26
Over 60 students	0	---	---	-----	----
Total Vo-ag Teacher Sample Data	61	66	172	127.93	2.98

teachers whose pupil load fell in the 15 or less, 16 to 30, and 31 to 45 students groups gave the Record Book a mean rating score of 2.92, 2.88, and 2.97 respectively. Except for the 46 to 60 pupil load group, it appeared that pupil load did not affect the opinions the vo-ag teachers had concerning the practicability of the Record Book.

Geographical location and usefulness of training to farmers. The data in Table IX summarizes the opinions that the vo-ag teachers had in regard to the usefulness of the record keeping training provided by the Record Book to those vo-ag students who became farmers after high school graduation as affected by the geographical location of the teachers' vo-ag departments. The teachers in the Northeast F. F. A. district gave the highest mean score rating (3.14) and the teachers in the North Central F. F. A. district gave the

TABLE IX

DATA ON VO-AG TEACHERS' RATINGS OF USEFULNESS OF THE RECORD  
KEEPING TRAINING IN KANSAS TO VO-AG STUDENTS WHO BECAME FARMERS  
AS AFFECTED BY GEOGRAPHICAL LOCATION OF TEACHERS' VO-AG DEPARTMENTS

State F.F.A. District	No. of Teachers	Total Score Range		Mean Rating Score	
		Low	High	Total Score	Per Part
Northeast	8	56	169	134.88	3.14
East Central	10	76	165	119.90	2.79
Southeast**	3	64	141	112.00	2.60
South Central	12	63	152	114.58	2.66
Southwest	8	99	157	128.36	2.99
Northwest	11	68	148	125.36	2.92
North Central	8	88	125	108.88	2.53
Total Vo-Ag Teacher Sample Data	60	56	169	121.10	2.82

\*\* One respondent did not complete this portion of the opinionnaire

lowest mean score rating (2.53). The data in Table IX followed very closely the data in Table V as all geographical area groups rated the record keeping training in the definitely useful range.

Years teaching experience and usefulness of record keeping training to farmers. A summary of the effect of teaching experience on the opinions the vo-ag teachers had in regards to the usefulness of the record keeping training to those vo-ag students who became engaged in farming after graduation from high school was given in Table X. Again as in Table VI, the

TABLE X

DATA ON VO-AG TEACHERS' RATINGS OF USEFULNESS OF THE RECORD  
KEEPING TRAINING IN KANSAS TO VO-AG STUDENTS WHO BECAME FARMERS  
AS AFFECTED BY YEARS OF TEACHING EXPERIENCE

Years Teaching Experience	No. of Teachers	Total Score Range		Mean Rating Score	
		Low	High	Total Score	Per Part
0 - 4	25	64	159	123.08	2.86
5 - 9	11	77	152	121.09	2.82
10 - 14	10	83	165	126.30	2.94
15 - 19	3**	63	141	111.67	2.60
20 - 24	8	56	169	119.50	2.78
25 - 29	1	76	76	76.00	1.77
30 - 34	0	--	--	-----	----
35 - 39	1	88	88	88.00	2.05
40 - 44	1	139	139	139.00	3.23
Total Vo-Ag Teacher Sample Data	60	56	169	121.10	2.82

\*\* One member of this group in the sample did not complete this portion of the opinionnaire

highest mean score rating (3.23) was given by the 40-44 years of experience group. The lowest mean score rating (1.77) was given by the 25-29 years of experience group. There was one respondent in each of these two groups. It appeared to the author that there was no relationship between years of teaching experience and the opinions of the vo-ag teachers concerning the usefulness of the record keeping training.

### III. OPINIONNAIRE PART II DATA

The data collected by means of the questions in Part II of the opinionnaire were used to analyze the characteristics of the sample of vo-ag teachers, to categorize the vo-ag teachers by years of teaching experience, by pupil load, and by institutions in which they earned their Bachelor of Science Degree, and to analyze the opinions the various survey groups had concerning the miscellaneous questions that were asked relative to the Record Book. The data concerning the miscellaneous questions were presented in narrative and table form in the following portion of the findings.

#### Adequacy of teacher education in the area of record keeping teaching.

As stated in pages one and two of this study, it appeared to the writer that either the students and/or their teachers did not have the necessary knowledge and skill required to keep complete and accurate records in the Record Book or it was no longer practicable. In an effort to determine where the vo-ag teachers received their record keeping teaching skills and to gather their opinions as to the adequacy of that training, the vo-ag teachers were asked to answer questions two, three, five, six, and seven of Part II of the opinionnaire. This data has been summarized in Table XI. Of the 24 teachers who had record keeping teaching instruction on the graduate school level, 18 indicated that the training was adequate for the teaching of record keeping. More than fifty per cent of the teachers in each of the other groups listed in Table XI indicated that their training in record keeping, at the educational levels specified, was not sufficiently adequate to enable them to teach record keeping. The largest percentage of "no votes" was recorded in the group of Kansas State University graduates with 0-4 years of teaching experience (64.7 per cent).

TABLE XI

DATA ON OPINIONS OF VO-AG TEACHERS CONCERNING  
ADEQUACY OF TEACHER EDUCATION IN THE AREA OF RECORD KEEPING TEACHING

Teacher Categories	No. of Teachers	Teacher Education Was Adequate For Teaching of Record Keeping	
		Yes	No
Teachers with former vo-ag Training in Kansas	28*	11	14
Teachers with former vo-ag Training in other states	12**	4	7
B. S. Degree earned at K.S.U.			
Total	45***	21	23
Graduates with 0-4 years teaching experience	17	6	11
B. S. Degree earned other than at K.S.U.	16	7	9
Teachers with graduate instruction in record keeping	24	18	6

\* 3 respondents did not answer as to training adequacy

\*\* 1 respondent did not answer as to training adequacy

\*\*\* 1 respondent did not answer as to training adequacy

Complexity of the Record Book. As stated on page one of this study, the writer had observed that a difference of opinion had existed regarding the complexity of the Record Book. In order to determine the relative complexity of the book, all three groups surveyed were asked to give their opinions on this factor by answering question eleven in Part II of the opinionnaire. This data has been summarized in Table XII. It was the opinion of 58.33 per cent of the vo-ag teachers, 100 per cent of the Kansas State

University group, and 33.33 per cent of the state staff that the majority of the vo-ag students could comprehend and use the Record Book successfully. It was the opinion of 36.67 per cent of the vo-ag teachers, 66.67 per cent of the state staff, and 0.00 per cent of the Kansas State University group that the Record Book was too complex for the majority of the students. The Record Book was too complex for all but the "A" student in the opinion of 5.00 per cent of the vo-ag teachers. There was no response from any of the three survey groups to the two answers that represented the least degrees of complexity.

TABLE XII

DATA ON OPINIONS CONCERNING COMPLEXITY OF THE RECORD BOOK

Degree of Complexity	Vo-Ag Teachers	State Staff	K.S.U. Staff	Total of All Groups
Not complex enough to challenge the "A" student	0.00%	0.00%	0.00%	0.00%
Not complex enough to challenge the majority of the students	0.00%	0.00%	0.00%	0.00%
The majority of the students can comprehend and use it successfully	58.33%	33.33%	100.00%	60.30%
Too complex for the majority of the students	36.67%	66.67%	0.00%	35.30%
Too complex for all but the "A" student	5.00%	0.00%	0.00%	4.40%

Too much time spent on record keeping? Questions eight and nine in Part II of the opinionnaire dealt with the amount of time spent in the area of record keeping instruction and whether or not the amount of time spent could

be justified on the basis of educational values gained.

The opinions of the vo-ag teachers as to the amount of time they spent in the area of record keeping was summarized in Table XIII. It was the opinion of 50.82 per cent of the teachers that they spent 10 per cent or less of their time in this activity. Another 47.54 per cent indicated that they spent from 11 per cent to 20 per cent of their time on record keeping activities. Of the sixty-one vo-ag teachers in the sample, one was of the opinion that he spent more than 20 per cent of his time in this activity.

TABLE XIII

DATA ON OPINIONS OF VO-AG TEACHERS CONCERNING  
PER CENT OF TOTAL TEACHER TIME SPENT IN AREA OF RECORD KEEPING

Amount of Time Spent	Vo-Ag Teachers' Opinions	
	Number	Per Cent
10% or less	31	50.82%
11% to 20%	29	47.54%
21% to 30%	1	1.64%
31% to 40%	0	0.00%
Other	0	0.00%

In regards to justification for the time spent teaching record keeping, 54 per cent of the vo-ag teachers, 80 per cent of the Kansas State University group, and 0 per cent of the state staff felt that the time spent could be justified. Conversely, 100 per cent of the state staff, 46 per cent of the vo-ag teachers, and 20 per cent of the Kansas State University group were of the opinion that the time spent could not be justified. The data on this



TABLE XIV

DATA ON MISCELLANEOUS OPINIONNAIRE QUESTIONS CONCERNING THE RECORD BOOK

Questions	Vo-Ag Teachers		State Staff		K.S.U. Staff	
	Yes	No	Yes	No	Yes	No
1. Do you feel that the <u>Record Book</u> now being used requires more student and teacher time than can be justified on the basis of educational values gained?	28	33	2*	0*	1	4
2. Do you feel that the <u>Record Book</u> has been a contributing factor that has materially affected the thinking of students who either did not enroll (as beginning students) or re-enroll in vo-ag classes at your school?	27*	33*	**	**	**	**
3. Do you teach a class in which the students receive on-the-job experiences in ag-related occupations?	11*	49*	**	**	**	**
4. Do you feel that the <u>Record Book</u> should have specific provisions for the recording of useful information concerning student experiences in ag-related occupations training?	39*	20*	0	3	4	1
Vo-ag teachers with ag-related classes	7	4				

TABLE XIV (continued)

Questions	Vo-Ag Teachers		State Staff		K.S.U. Staff	
	Yes	No	Yes	No	Yes	No
5. Do you feel that electronic record keeping (data processing) will replace the need for vo-ag teachers to teach enterprise analysis?	9	52	1	2	1	4
6. Do you feel that the Record Book is practicable in terms of record keeping skills learned that will be used by the students who become engaged in farming after graduation from high school?	54	7	3	0	5	0

\* One or members of the group did not answer the question.

\*\* This group was not asked to answer this question.

part of the study were presented in Table XIV.

The Record Book and enrollment. Question ten of Part II of the opinionnaire dealt with the possibility that the time and energy spent in keeping accurate and complete records in the Record Book might have had a negative effect upon vo-ag enrollment. It was the opinion of 55 per cent of the vo-ag teachers that it had not had a negative effect. Data concerning question ten was presented in Table XIV.

Ag-related occupations records. Question thirteen of Part II of the opinionnaire asked if provisions should be made in the Record Book for the recording of information concerning ag-related occupations experiences. It was the opinion of 66 per cent of the vo-ag teacher sample, 0 per cent of the state staff, and 80 per cent of the Kansas State University group that provisions of such type should have been included in the Record Book. It was the opinion of seven of the eleven vo-ag teachers in the sample who were conducting ag-related occupations classes that provisions should be included in the Record Book for the recording of ag-related on-the-job experiences.

Data processing and enterprise analysis. The data in Table XIV indicated that two-thirds or more of the respondents in the groups surveyed did not believe that electronic record keeping (data processing) would replace the need for vo-ag teachers to teach enterprise analysis. A "no" answer was given to question fourteen in Part II of the opinionnaire by 85 per cent of the vo-ag teachers, 66.7 per cent of the state staff, and 80 per cent of the Kansas State University group.

Was the Record Book practicable? Question fifteen in Part II of the opinionnaire asked whether the respondent was or was not of the opinion that the Record Book was practicable in terms of record keeping skills learned that would be used by the students who became engaged in farming after

graduation from high school. Since this question had already been answered through Part I, Column B of the opinionnaire, it was included to check the consistency of the respondents' answers. A "yes" answer was given to this question by 88.5 per cent of the vo-ag teachers, 100 per cent of the state staff, and 100 per cent of the Kansas State University group. After comparing these data with the data in Table III, it was concluded by the writer that the respondents were consistent in their answers.

Record Book parts listed by usefulness for vo-ag student categories.

The mean rating scores of the three survey groups combined ranked the Record Book parts on the basis of their usefulness for the vo-ag student as follows:

VERY HIGHLY USEFUL

Receipts  
Expenses

DEFINITELY USEFUL

F.F.A. Leadership Record  
Supervised Program  
Farming Program Agreement  
Classification of Receipts  
Classification of Expenses  
Depreciation Schedule  
Inventory of Grains and Feeds--Seeds  
and Supplies--Poultry  
Inventory of Livestock  
Inventory of Farm Receivables  
Inventory of Farm Payables  
Net Farm Income Computed on Accrual Basis  
Schedule of Farm Income and Expenses Computed  
by the Cash Method  
Net Worth Statement  
End-of-Year Accuracy Check  
Livestock Analysis  
Livestock Breeding, Production and  
Mortality Record  
(a) Cattle Record  
(b) Sheep Flock Record  
(c) Poultry Record  
(d) Swine Record  
Dairy Herd Production Record  
Livestock Mortality

## Livestock Production Record

- (a) Sheep
- (b) Poultry
- (c) Cattle
- (d) Hogs

## Crop Record

- (a) Crop Production Record
- (b) Operation
- (c) Crop Analysis
- (d) Practice

## Personal Expenditures

## Gestation Table

## USEFUL

## Farming Program Pictures and Clippings

## Diary

## Progress Report

## Egg Production

## Farm Products Used at Home

## Livestock Feed and Labor Record

## Map of Land Operated

## Crop Record

- (e) Supply and Disposal

## Inventory of Personal Goods

## Plans for Long Time Farming Program

SOMEWHAT USEFUL -- no parts ranked in this category

NOT USEFUL -- no parts ranked in this category

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of the study was to survey opinions as to the practicability (usefulness) and the need for revision of the various sections of the Kansas Vocational Agriculture Record Book from the viewpoint of: (1) teachers of vocational agriculture; (2) state supervisory staff members; and (3) vocational agriculture teacher educators at Kansas State University.

The respondent vo-ag teacher group was selected by random sample methods. The state supervisory staff and the teacher educator groups represented the entire population of those groups. Data were collected through the use of a closed form mail opinionnaire which was developed by the writer with the advice of his graduate advisor. Response was received from one hundred per cent of each of the three groups.

Each respondent was asked in Part I of the opinionnaire to give his opinion as to the practicability of each of the forty-three sections of the Record Book as follows: (1) Column A--opinions related to the usefulness of that part of the book to the student while enrolled in vo-ag; and (2) Column B--opinions related to the usefulness of that kind of record keeping training to the vo-ag graduate who became engaged in farming. The respondents indicated a degree of practicability for each section of the book by means of a rating scale which ranged from four (highest) to zero (lowest). Part II of the opinionnaire contained closed form questions dealing with the information that was used to determine if any relationships existed concerning the opinions the vo-ag teachers had in regards to the usefulness of the Record Book as affected by such factors as years of teaching experience, geographical location of the

teachers' vo-ag departments, pupil load, and institution from which the teachers received their Bachelor of Science Degree. Additional questions were asked in Part II of the opinionnaire regarding the amount of time spent by the teacher and students in the area of record keeping, the complexity of the Record Book, the adequacy of the vo-ag teachers' record teaching training, and some miscellaneous questions that might have provided useful information if the Record Book was to be revised.

Mean scores were determined for each of the forty-three items in Part I, Column A and B of the opinionnaire for each of the three groups surveyed and for the three groups combined. In addition, mean scores were determined for the vo-ag teachers based on years of teaching experience, geographical location in the state, teaching (pupil) load, and institution from which the Bachelor of Science Degree was earned. Cumulative percentages were used to analyze the data acquired through most of the questions in Part II of the opinionnaire. The writer was advised that due to the small number of people in two of the three groups it was not advisable to carry out more complicated statistical analysis.

## I. SUMMARY AND CONCLUSIONS

The data collected in this study were summarized according to the purpose and the research design of the study and according to the parts of the opinionnaire.

It was found through Part I, Column A of the opinionnaire that the vo-ag teachers and the Kansas State University teacher educator staff had similar overall opinions concerning the Record Book and that the state supervisory staff had a lesser opinion of the practicability of the Record Book. The opinion of all three of the groups combined was that ten sections of the

Record Book should have been retained but modified, thirty-one parts should have been retained and possibly modified, and two sections should have been retained in their then existent form. These data, coupled with the combined mean rating scale score being 2.73, allowed the author to conclude that the Record Book was practicable in the opinion of the respondents. However, it had a minimum of ten parts and a maximum of forty-one parts out of a total of forty-three parts that should have been modified. A revision of some parts of the Kansas Vocational Agriculture Record Book was needed.

Part I, Column B data indicated that all three respondent groups had similar opinions regarding the usefulness of the record keeping training to those vo-ag students who became engaged in farming after graduation from high school and it was concluded that all three groups were of the opinion that this training should have been of definite value to the graduate. This was evidenced by an overall mean rating scale score for the entire Record Book of 2.88. Thus, it was concluded by the writer that the record keeping training afforded by the use of the Record Book was practicable.

Vo-ag teachers from the various geographical areas in the state (F.F.A. districts) were compared as to their opinions concerning the usefulness of the Record Book to the vo-ag student. Since the teachers from all of the F.F.A. districts rated the Record Book in the definitely useful range, it was concluded that geographical location was not a factor that affected the teachers' opinions and it was concluded that it was not a factor to be considered when and if revisions were to be made.

It was also concluded that the length of teaching experience of the vo-ag teacher had no relation to his opinion concerning the usefulness of the Record Book. It had been assumed by the writer that the longer a teacher had taught, the better he would understand how to teach the use of the Record



Book and the higher would have been his opinion of the Record Book.

The writer had also assumed that vo-ag teachers who had graduated from Kansas State University would have been more inclined to rate the book higher than would graduates from institutions from outside the state as those teachers from outside the state would probably have been introduced to another record book and would possibly have developed an affinity to it. It was concluded from the study that there was little or no relationship in this regard.

Since, in the opinion of the writer, the Record Book contained rather extensive fiscal and enterprise cost accounting provisions and since to complete all of the various parts of the book might have required a considerable amount of teacher and student time, it was decided to determine if pupil load had any effect on the opinions teachers had concerning the book. It was concluded that pupil load had no relationship to the vo-ag teachers' opinions concerning the practicability of the Record Book.

It was likewise concluded that neither geographical location in the state nor teaching experience had any relationship to the opinions vo-ag teachers had concerning the usefulness of the record book training to the vo-ag graduate who became engaged in farming after graduation from high school.

In essence it was concluded that all groups surveyed and the sub-groups within the vo-ag teachers group on which data were summarized all were of the opinion that the Kansas Vocational Agriculture Record Book was practicable and the training provided through the use of the book was useful to both the vo-ag student and to the vo-ag graduate who became engaged in farming.

The vo-ag teachers' educational preparation in the area of record keeping teaching in Kansas was inadequate except for those teachers who had taken graduate school courses in agricultural education.

Opinions differed between the three survey groups as to the complexity of the Record Book. Although 60.3 per cent of the respondents indicated that they felt that the majority of the students could have comprehended and used it successfully, the mean response tended toward the too complex side. There was no response from any of the respondents to the two possible answers that represented the least degrees of complexity and there were numerous responses to those answers which indicated the higher degrees of complexity.

The vo-ag teachers in Kansas spent from one-tenth to one-fifth of their time in the area of record keeping instruction. The state staff was of the opinion that the amount of time that was being spent in record keeping activities was not justifiable. The Kansas State University group thought that the amount of time being spent was justifiable and 54.1 per cent of the vo-ag teachers were of a similar opinion.

Apparently the record keeping activities in Kansas vo-ag departments were a factor affecting vo-ag enrollment negatively. This was the opinion of forty-five per cent of the vo-ag teachers.

Provisions for the recording of ag-related occupations experiences information should have been provided in the Record Book. This was the opinion of more than 66 per cent of the vo-ag teacher respondents and the Kansas State University vo-ag teacher educator staff. However, the state supervisory staff members were unanimous in their opinion that those records should not have been kept in the Record Book.

It was the opinion of the respondents that data processing record keeping would not eliminate the need for vo-ag teachers to teach enterprise analysis.

In summary, it was concluded that the findings of the study indicated that the Kansas Vocational Agriculture Record Book was practicable to the

vo-ag student and the skills learned through its use were of definite value to the vo-ag student who became engaged in farming after graduation from high school. However, some parts of the book were in need of revision.

## II. RECOMMENDATIONS

The recommendations were based upon observations made during the period of the study and the author's interpretation of the data. They were as follows:

1. A study should be made to determine the degree of accuracy and completeness that is being attained in the Record Book by vo-ag students in Kansas.

2. A committee of vo-ag teachers, state staff members, and Kansas State University vo-ag teacher educators should be appointed by the state supervisor of vocational agriculture to study the Record Book and to recommend deletions, additions, and modifications that could be made that might make the Record Book less complex and yet retain those provisions in the book that allow for complete and accurate farming program record keeping.

3. Additional provisions should be made in the Kansas State University agricultural education students' preparation to teach record keeping. In addition, provisions should be made to offer training of a similar nature to those vo-ag teachers who come to Kansas to teach but who earned their Bachelor of Science Degree outside of Kansas.

4. Provisions should be made in the Record Book for the recording of ag-related occupations experiences information.

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## B. SECONDARY SOURCES

### 1. Books

Kansas Vocational Agriculture Record Book. Danville: The Interstate Printers & Publishers, Inc., 1969.

Vocational Agriculture Record Book for Production Agriculture. Baltimore: French-Bray Printing Company, 1966.

### 2. Periodicals

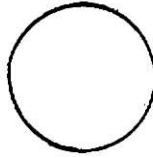
"Purposes of the Supervised Practice Record Book," Agricultural Education, 38:190, February, 1966.

### 3. Publications of the Government, Learned Societies, and Other Organizations

Setting Up Farm Records to Provide for Analysis. Urbana: College of Agriculture, Illinois University, Report Number UI-VAS-2037, 1963.

## APPENDIX

## LETTER OF TRANSMITTAL #1



Dime Placed Here for  
Cup of Coffee

March 30, 1970

Richard Ramsdale  
Vo-Ag Instructor  
McPherson Sr. High School  
McPherson, Kansas 67460

Dear Sir:

Hey! Have a cup of coffee on me. While you are having the coffee, will you please complete the enclosed opinionnaire?

The opinionnaire is concerned with determining the desirable characteristics of the Kansas Vocational Agriculture Record Book (the student's farming program record book). The results of this study will indicate whether or not this book needs to be evaluated for possible changes.

I am particularly desirous of obtaining your responses because, as a result of your experiences as a vocational agriculture teacher, you are in a position to know the degree of practicability that this book possesses in relation to the needs of your students and of your graduates who are engaged in farming. The results of this study will be used to complete a thesis I am writing as part of the requirements for a Masters Degree.

It will be appreciated if you will complete the enclosed opinionnaire and return it by April 15, 1970. A self-addressed, stamped envelope is enclosed for your convenience.

Thank you for your cooperation.

Sincerely,

Richard L. Ramsdale  
Vo-Ag Teacher  
McPherson H.S.



## LETTER OF TRANSMITTAL #2

April 17, 1970

Richard Ramsdale  
Vo-Ag Instructor  
McPherson Sr. High School  
McPherson, Kansas 67460

Dear Sir:

I recently mailed opinionnaires to one-third of the Vo-Ag teachers in Kansas. You were included in the mailing list. Since as of this date I have not received your reply, I am wondering if it was not received or has been accidentally misplaced. I need your opinions. Thus, I am enclosing another copy of the opinionnaire and a self addressed, stamped envelope for its return.

The opinionnaire includes several pages of questions, but it should not require much of your time to complete. The results of this survey should be of concern to all Vo-Ag teachers in Kansas.

Your prompt attention to this opinionnaire will be appreciated.

Sincerely,

Richard L. Ramsdale  
Vo-Ag Teacher  
McPherson H.S.

AN ANALYSIS OF THE PRACTICABILITY OF THE KANSAS VOCATIONAL  
AGRICULTURE FARMING PROGRAM RECORD BOOK

OPINIONNAIRE

PART I. OPINIONS CONCERNING SPECIFIC PARTS OF THE KANSAS VOCATIONAL  
AGRICULTURE RECORD BOOK.

The various parts of the Kansas Vocational Agriculture Record Book are listed in the order that they appear in the book. No ranking is intended. Each numbered item must stand alone, and on its own merits, as to its usefulness

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DIRECTIONS: As an experienced educator, please circle the appropriate number for each item, indicating your opinion concerning the usefulness or practicability of each part of the Kansas Vocational Agriculture Record Book.

Column A relates to the usefulness of that part of the book to student while enrolled in Vo-Ag.

Column B relates to the usefulness of that kind of record keeping training to the student if he were to become engaged in farming after graduation from high school.

KEY TO SCALE: Practicability YOU would consider;

0. NOT USEFUL - Should be deleted from the book. Contains records that have little or no value to the Vo-Ag student and/or farmer.
1. SOMEWHAT USEFUL - Could be deleted from the book. Contains records of only minor importance to the student and/or farmer. If retained, the form of the record should be modified.
2. USEFUL - Should probably be retained in the book. Contains records that should be of value to the student and/or farmer. The form of the record should be modified.
3. DEFINITELY USEFUL - Should be retained in the book. Contains records that are of definite value to the student and/or farmer. The form of the record possibly could be modified.
4. VERY HIGHLY USEFUL - Must be retained in the book. Contains records that are very important to the student and/or farmer. The form of the record is satisfactory.

-2-

0. NOT USEFUL  
 1. SOMEWHAT USEFUL  
 2. USEFUL  
 3. DEFINITELY USEFUL  
 4. VERY HIGHLY USEFUL

## PART I. PARTS OF THE RECORD BOOK

Circle One Number In Each  
 Column For Each Item

	Col. A Vo-Ag Student					Col. B Farmer				
1. F.F.A. Leadership Record	0	1	2	3	4	0	1	2	3	4
2. Supervised Program	0	1	2	3	4	0	1	2	3	4
3. Farming Program Pictures and Clippings	0	1	2	3	4	0	1	2	3	4
4. Diary	0	1	2	3	4	0	1	2	3	4
5. Farming Program Agreement	0	1	2	3	4	0	1	2	3	4
6. Classification of Receipts	0	1	2	3	4	0	1	2	3	4
7. Receipts	0	1	2	3	4	0	1	2	3	4
8. Classification of Expenses	0	1	2	3	4	0	1	2	3	4
9. Expenses	0	1	2	3	4	0	1	2	3	4
10. Depreciation Schedule	0	1	2	3	4	0	1	2	3	4
11. Inventory of Grains and Feeds--Seeds and Supplies--Poultry	0	1	2	3	4	0	1	2	3	4
12. Inventory of Livestock	0	1	2	3	4	0	1	2	3	4
13. Inventory of Farm Receivables	0	1	2	3	4	0	1	2	3	4
14. Inventory of Farm Payables	0	1	2	3	4	0	1	2	3	4
15. Net Farm Income Computed on Accrual Basis	0	1	2	3	4	0	1	2	3	4
16. Schedule of Farm Income and Expenses Computed by the Cash Method	0	1	2	3	4	0	1	2	3	4
17. Net Worth Statement	0	1	2	3	4	0	1	2	3	4
18. Progress Report	0	1	2	3	4	0	1	2	3	4
19. End-of-year Accuracy Check	0	1	2	3	4	0	1	2	3	4
20. Livestock Analysis	0	1	2	3	4	0	1	2	3	4

Circle One Number In Each  
Column For Each Item

	Col. A Vo-Ag Student	Col. B Farmer
21. Livestock Breeding, Production and Mortality Record		
(a) Cattle Record	0 1 2 3 4	0 1 2 3 4
(b) Sheep Flock Record	0 1 2 3 4	0 1 2 3 4
(c) Poultry Record	0 1 2 3 4	0 1 2 3 4
(d) Swine Record	0 1 2 3 4	0 1 2 3 4
22. Dairy Herd Production Record	0 1 2 3 4	0 1 2 3 4
23. Egg Production	0 1 2 3 4	0 1 2 3 4
24. Livestock Mortality	0 1 2 3 4	0 1 2 3 4
25. Farm Products Used at Home	0 1 2 3 4	0 1 2 3 4
26. Livestock Production Record		
(a) Sheep	0 1 2 3 4	0 1 2 3 4
(b) Poultry	0 1 2 3 4	0 1 2 3 4
(c) Cattle	0 1 2 3 4	0 1 2 3 4
(d) Hogs	0 1 2 3 4	0 1 2 3 4
27. Livestock Feed and Labor Record	0 1 2 3 4	0 1 2 3 4
28. Map of Land Operated	0 1 2 3 4	0 1 2 3 4
29. Crop Record		
(a) Crop Production Record	0 1 2 3 4	0 1 2 3 4
(b) Operation	0 1 2 3 4	0 1 2 3 4
(c) Crop Analysis	0 1 2 3 4	0 1 2 3 4

-4-

0. NOT USEFUL  
 1. SOMEWHAT USEFUL  
 2. USEFUL  
 3. DEFINITELY USEFUL  
 4. VERY HIGHLY USEFUL

## PART I. (Continued)

Circle One Number In Each  
 Column For Each Item

	Col. A Vo-Ag Student					Col. B Farmer				
(d) Practice	0	1	2	3	4	0	1	2	3	4
(e) Supply and Disposal	0	1	2	3	4	0	1	2	3	4
30. Inventory of Personal Goods	0	1	2	3	4	0	1	2	3	4
31. Personal Expenditures	0	1	2	3	4	0	1	2	3	4
32. Plans for Long Time Farming Program	0	1	2	3	4	0	1	2	3	4
33. Gestation Table	0	1	2	3	4	0	1	2	3	4

## PART II. PERSONAL AND RELATED SURVEY INFORMATION

DIRECTIONS: Place an X on the line which best indicates your teaching experience, record keeping education background, and opinions concerning the Kansas Vocational Agriculture Record Book.

1. Total years as a vocational agriculture teacher (including current year).

1 or 2 years \_\_\_\_

11 to 15 years \_\_\_\_

3 to 6 years \_\_\_\_

Over 15 years \_\_\_\_

7 to 10 years \_\_\_\_

2. Were you ever a vo-ag student in a Kansas high school? Yes \_\_\_\_ No \_\_\_\_

In another state? Yes \_\_\_\_ No \_\_\_\_

3. Was your record keeping training while enrolled as a vo-ag student adequate enough to enable you to teach students to keep accurate and complete records in the Kansas Vocational Agriculture Record Book? (Do not answer this question if your answer to question #2 was "no" to both parts)

Yes \_\_\_\_ No \_\_\_\_

-5-

4. Indicate the college or university from which you received the B. S. Degree in Agricultural Education.

Kansas State University \_\_\_\_\_ Other (Specify) \_\_\_\_\_

5. Do you consider that your undergraduate training in the area of farm record keeping was adequate enough to enable you to teach students to keep complete and accurate records in the Kansas Vocational Agriculture Record Book?

Yes \_\_\_\_\_ No \_\_\_\_\_

6. Have you had training on the graduate school level concerning the use of the Kansas Vocational Agriculture Record Book?

Yes \_\_\_\_\_ No \_\_\_\_\_

7. If your answer to this question was "Yes", was it adequate enough to enable you to teach students to keep complete and accurate records in the Kansas Vocational Agriculture Record Book?

Yes \_\_\_\_\_ No \_\_\_\_\_

7. What is the average number of students per year that you assist in the closing out of their record books?

15 or less _____	46 to 60 _____
16 to 30 _____	Over 60 _____
31 to 45 _____	

8. What percent of your teaching, planning, and supervision time is spent in the area of record keeping?

10% or less _____	31 to 40% _____
11 to 20% _____	Other (Specify) _____
21 to 30% _____	

9. Do you feel that the record book now being used requires more student and teacher time than can be justified on the basis of educational values gained?

Yes \_\_\_\_\_ No \_\_\_\_\_

10. Do you feel that the farming program record book has been a contributing factor that has materially affected the thinking of students who either did not enroll (as a beginning student) or re-enroll in vo-ag classes at your school?

Yes \_\_\_\_\_ No \_\_\_\_\_

-6-

11. Which of the following best describes your opinion concerning the complexity of the Record Book currently being used in Kansas in relation to the students' ability to comprehend and successfully use the book?
- ☐ Not complex enough to challenge the "A" student  
☐ Not complex enough to challenge the majority of the students  
☐ The majority of the students can comprehend and use it successfully  
☐ Too complex for the majority of the students  
☐ Too complex for all but the "A" student
12. Do you teach a class in which the students receive on-the-job experiences in Ag-Related Occupations?
- Yes ☐ No ☐
13. Do you feel that the record book should have specific provisions for the recording of useful information concerning student experiences in Ag-Related Occupations training?
- Yes ☐ No ☐
14. Do you feel that electronic record keeping (data processing) will replace the need for vo-ag teachers to teach enterprise analysis?
- Yes ☐ No ☐
15. Do you feel that the record book is practicable in terms of record keeping skills learned that will be used by the students who become engaged in farming after graduation from high school?
- Yes ☐ No ☐

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If you would like a copy of the summary of this study, please complete the following:

Name

School

Address

AN ANALYSIS OF THE PRACTICABILITY OF THE KANSAS VOCATIONAL  
AGRICULTURE FARMING PROGRAM RECORD BOOK

by

RICHARD LEIGH RAMSDALE

B. S., Kansas State University, 1950

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AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1970



The purpose of the study was to survey opinions as to the practicability (usefulness) and the need for revision of the various sections of the Kansas Vocational Agriculture Record Book from the viewpoint of: (1) teachers of vocational agriculture; (2) state supervisory staff members; and (3) vocational agriculture teacher educators at Kansas State University.

Data were collected through the use of a closed form mail opinionnaire. The respondent vo-ag teacher group was selected by random sample methods and included sixty-one of the one hundred eighty vo-ag teachers in Kansas. The respondent state staff member group and the respondent teacher educator group from Kansas State University included the total population of those groups. Response was received from one hundred per cent of each of the three groups.

Respondents' opinions as to the practicability (usefulness) of each of the forty-three parts of the Record Book were indicated by means of a rating scale score. The respondents rated the usefulness of the parts of the Record Book for the vo-ag student and the usefulness of the training provided by the parts of the Record Book to the vo-ag graduate who became engaged in farming after graduation. Consensus was measured by means of mean rating scores on each part of the Record Book and on the entire Record Book by individual respondent groups and by all three groups combined. Additional miscellaneous questions concerning the Record Book were asked and the data on these questions were analyzed by means of cumulative percentages.

Some of the findings were:

1. The combined mean rating scale score indicated that the Record Book was practicable for the vo-ag student in the opinion of the respondents. However, it had a minimum of ten parts and a maximum of forty-one parts out of a total of forty-three parts that should have been modified. The consensus of the responses of the three groups suggested that a revision of some parts

of the Record Book was needed.

2. The record keeping training afforded by the use of the Record Book was practicable for the vo-ag graduate who became engaged in farming after graduation from high school.

3. The opinions of the vo-ag teachers as to the practicability of the Record Book was not affected by geographical location of the teachers' vo-ag departments, pupil load, length of teaching experience, and institution from which the teachers had received their Bachelor of Science Degree.

4. All of the responses concerning the complexity of the Record Book were to the three possible answers representing the higher degrees of complexity. The consensus of the responses indicated that the Record Book was a complex book.

5. The findings indicated that the vo-ag teachers in Kansas spent from one-tenth to one-fifth of their time in the instruction of record keeping.

6. Some vo-ag teacher respondents (forty-five per cent) considered record keeping activities in Kansas vo-ag departments as having a negative effect on enrollment.

#### RECOMMENDATIONS

The recommendations were based upon observations made during the period of the study and the author's interpretation of the data.

1. A study should be made to determine the degree of accuracy and completeness that is being attained in the Record Book by vo-ag students in Kansas.

2. A committee of vo-ag teachers, state supervisory staff members, and Kansas State University vo-ag teacher educators should be appointed by

the state supervisor of vocational agriculture to study the Record Book and to recommend deletions, additions, and modifications that could be made that might make the Record Book less complex and yet retain those provisions in the book that allow for complete and accurate farming program record keeping.

3. Additional provisions should be made in the Kansas State University agricultural education students' preparation to teach record keeping. In addition, provisions should be made to offer training of a similar nature to those vo-ag teachers who come to Kansas to teach but who earned their Bachelor of Science Degree outside of Kansas.

4. Provisions should be made in the Record Book for the recording of ag-related occupations experiences information.