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ABSTRACT

To provide teachers of vocational agriculture, agricultural supervisors, and agricultural teacher educators with information on current curriculum materials available to them, this annotated bibliography presents 207 references classified according to the AGDEX filing system. Topics are: (1) Field Crops, (2) Horticulture, (3) Forestry, (4) Animal Science, (5) Soils, (6) Diseases and Pests, (7) Agricultural Engineering, (8) Agricultural Economics, (9) Agricultural Occupations, and (10) Professional. The availability and price of each reference are specified in the annotation. Materials collected during 1969-70 are available in ED 038 507. (GB)

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**A DESCRIPTION AND SOURCE LISTING  
OF  
CURRICULUM MATERIALS IN AGRICULTURAL EDUCATION**

**Developed and published by the Curriculum Materials  
Committee of the Agricultural Education Division of the A.V.A.**

**1970-1971**



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## FOREWORD

The publication "A Description and Source Listing of Curriculum Materials in Agricultural Education" is published annually by the Curriculum Materials Committee of the Agricultural Education Division of the American Vocational Association. The purpose of the publication is to inform teachers of vocational agriculture, agricultural supervisors, agricultural teacher educators, and other interested persons of current agricultural curriculum materials that are available to them.

The Curriculum Materials Committee collects information concerning available curriculum materials prior to the annual A. V. A. convention. The materials are classified by the committee for the "Source Listing." The criteria used for selecting the information are as follows:

- a. The material has been developed by persons engaged in vocational education in agriculture for use primarily in that field.
- b. The material has been developed during the past year or is current information that has not previously been listed in the "Source Listing."
- c. The material is not being distributed commercially.
- d. The material would be of interest and use beyond the boundary of the state in which it is being prepared.
- e. The material will be available from its source and/or may be available through the ERIC System.

Some of the materials announced in this "Source Listing" have been included in Abstracts of Instructional Materials in Vocational and Technical Education (AIM). The issues of AIM in which an abstract of the document appears, or will appear, has been noted in this publication. Many of the other items will appear in future issues of AIM.

The materials are classified according to the AGDEX filing system which has been revised by the Curriculum Materials Committee. The AGDEX system is the basis of the organization of this "Source Listing."

It is the wishes of the Committee that this "Source Listing" will prove useful to you in obtaining up-to-date information.

Harlan E. Ridenour, Chairman  
Curriculum Materials Committee  
Agricultural Education Division  
American Vocational Association

A DESCRIPTION AND SOURCE LISTING  
OF  
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1970-1971

Prepared by

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## AGDEX FILING SYSTEM - AIM and ARM

AGDEX, A SYSTEM FOR CLASSIFYING, INDEXING, AND FILING AGRICULTURE PUBLICATIONS. Howard L. Miller and Ralph J. Woodin, revised 1969. The teachers of vocational agriculture and county extension agents using a broad spectrum of agricultural publications. AGDEX was designed for nationwide use and can be adapted to the agriculture of widely differing areas. AGDEX is published on a non-profit basis by the American Vocational Association for the Agricultural Education Division as a service to its members. The AGDEX filing system includes a spiral bound filing guide as well as nearly 1,200 color coded, gummed labels. Available from: Publications Department, American Vocational Association, 1510 H Street, N. W., Washington D. C. 20005. Price: \$4.00 per single copy. \$3.50 in lots of 50 or more. ERIC; See AIM Spring 1970.

AGDEX FILING SYSTEM, INSTALLING AND USING. Ralph J. Woodin and Harlan E. Ridenour, 1969. A series of 29 color slides and script explaining what AGDEX filing will do for you, how the system may be installed, and how to use the filing system. Should be used with teachers and others desiring to learn how to install and use the AGDEX filing system. Available from: Harlan E. Ridenour, Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Price: \$4.50.

ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (AIM). Quarterly (Fall, Winter, Spring, Summer). Announces the availability of documents acquired and processed by the ERIC Clearinghouse on Vocational and Technical Education. Includes abstracts of materials typically designed for teacher use or student use in the classroom, and annotations of bibliographies or lists of instructional materials in all vocational areas. AIM will be of particular interest to teachers, curriculum specialists, supervisors, and administrators involved in the use of instructional materials in the teaching-learning setting, or in curriculum development. The publication is organized by service area to assist users in finding a central listing of materials relating to their specific interest (i. e. agricultural education, business and office education, distributive education, etc.).

Subscriptions are available for \$11.00 for one year or \$18.00 for two years beginning with the Fall 1968 issue or subsequent issues. Send order indicating quarter and year subscription is to begin to: ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210. (Make checks payable to The Center for Vocational and Technical Education).

ABSTRACTS OF RESEARCH AND RELATED MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (ARM). Quarterly (Fall, Winter, Spring, Summer). Announces the availability of documents acquired and processed by the ERIC Clearinghouse on Vocational and Technical Education. Includes abstracts of research and other materials which are useful to a wide range of users such as researchers, supervisors, teacher educators, educational specialists, administrators, teachers and others who have an interest in vocational and technical education. The publication is organized by topics such as administration, evaluation, teaching and learning, facilities and equipment, curriculum, etc. It also includes a vocational service index that provides a central listing of materials relating to specific areas of interest (i. e. agricultural education, business and office education, distributive education, etc.).

Subscriptions are available for \$11.00 for one year or \$18.00 for two years beginning with the Fall 1968 issue or subsequent issues. Send order indicating quarter and year subscription is to begin to: ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210. (Make checks payable to The Center for Vocational and Technical Education).

## AGDEX 100 FIELD CROPS

1. **PLANT AND SOIL SCIENCE - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES.** 1970. AGDEX 100/00. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. For advanced students of vocational agriculture. Curricular level and student behavioral objectives are suggested for 11 teaching units in plant and soil science. The outline includes the following: Review of soils, Land judging, Determining nutrients needed and adding essential fertilizers, Irrigating crops and draining fields, Growing and reproducing crops, Producing forage crops, Producing field crops, Identifying and judging crop plants and seeds, Identifying and controlling weeds, Identifying and controlling insects and diseases of crops, and Using chemicals in agriculture. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.
2. **SOURCE UNITS FOR PLANTS SCIENCE.** 1967. AGDEX 100/00. Raymond M. Clark and others. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. This book offers a series of units to help vocational agriculture teachers present basic principles in crop production and to develop attitudes and abilities related to such work. There are separate units on conditions affecting crop production, seed germination and storage, functions of plant parts, nutrition, diseases, environmental controls, insects, plant improvement, propagation, and occupational opportunities. Each unit contains a content outline, objectives, principles problems and questions, and suggested activities. There is a bibliography at the end of the report. Price: \$1.50. Available in limited quantity.
3. **DEMONSTRATIONS IN FARM CROPS.** 1965. AGDEX 100/00. Raymond M. Clark and Boyd R. Churchill. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. This booklet is a collection of experiments and demonstrations for use in teaching crop science. It discusses the role of demonstrations in teaching, then describes some sixteen demonstrations on topics such as corn storage, storing forages, testing grain, seed germination, weed identification and control, plant nutrition, etc. There are bibliographies for each demonstration, and a general bibliography at the end of the booklet. Price: \$1.25. Available in limited quantity.
4. **RESOURCE UNIT ON PLANT GROWTH AND DEVELOPMENT FOR CORE CURRICULUM.** 1970. AGDEX 100/10. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
5. **RESOURCE UNIT ON PLANT PRODUCTION MANAGEMENT FOR CORE CURRICULUM.** 1970. AGDEX 100/10. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
6. **PREPARING THE SOIL FOR PLANTING - Publication AP-3.** 1970. AGDEX 100/510. Claude E. Richard. Source: Agricultural Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. A lesson outline for use by teachers in developing their teaching plan for teaching this unit. Single copy available to state staff request.

7. RESOURCE UNIT ON PLANT DISEASES FOR CORE CURRICULUM. 1970. AGDEX 100/630. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
8. CONSTRUCTION OF AGRICULTURAL BUILDINGS AND CONVENIENCES - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES. 1970. AGDEX 110. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. For advanced students of vocational agriculture. Curricular level and student behavioral objectives are suggested for 11 instructional units in agricultural buildings and conveniences. References are cited for each unit. The outline includes the following: Job entry requirements and availability; Safety in the shop and on the job; Learning the terms of the trade and types of buildings for agricultural production or industry; Cut and framing a building, painting farm buildings, using concrete in building construction; Laying concrete block; Constructing and maintaining fences, providing occupational experiences for students. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantities.
9. HOW CEREAL CROPS GROW. 1967. AGDEX 110/05. L. S. Jensen and H. L. Lund, Extension Agronomists, NDSU. Source: North Dakota Vocational Agriculture Association, Room 100, Morrill Hall, North Dakota State University, Fargo, North Dakota 58102. Well illustrated, describes the important structures and functions of a cereal plant. 39 pages, printed. Price: \$ .75. Available in quantity.
10. CONTROLLING CORN INSECTS. VAS 4040a. 1971. AGDEX 111/620. R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a 20-page subject-matter unit that gives the description, life cycle, and possible damage caused by insects that attack corn seed and the various parts of the corn plant. In addition, it includes possible chemical and cultural control. Price: \$ .25 postpaid when payment accompanies order. Available in quantity.
11. INDIVIDUAL STUDY GUIDE FOR DRYING CORN ON THE FARM. 1970. AGDEX 111/736. Wiley B. Lewis. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student manual dealing with the following three types of corn drying: heated forced air; natural forced air; and natural drying in storage. Price: \$1.75. Available in quantity. ERIC; See AIM Spring 1971.
12. CORN PICKERS AND PICKING CORN. 1970. AGDEX 111/745. 137 pp. Wiley B. Lewis. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student manual extensively illustrated with pictures line drawings, and graphs. The subject matter is divided into the following areas: (1) The value of doing a good job of picking corn, (2) The basic design of the corn picker, (3) Operation of the corn picker, (4) Economics of corn picker ownership, and (5) Safety tips. Price: \$1.85. Available in quantity. ERIC; See AIM Spring 1971.
13. SOYBEAN DISEASES IN ILLINOIS. Slidefilm 747. 1970. AGDEX 141/630. M. C. Shurtleff and R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 39 frames. It discusses the common soybean diseases and pictures the common

symptoms as they occur in plants. Price: \$2.75 postpaid when payment accompanies order. Available in quantity.

14. FACTORS AFFECTING CLASSES AND GRADES OF SOYBEANS. Slidefilm 746. 1970. AGDEX 141/844. R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 34 frames. It discusses the various classes and grades of soybeans and pictures the various damaged kernels that affect market grades. Price: \$2.60 postpaid when payment accompanies order. Available in quantity.

#### AGDEX 200 HORTICULTURE

15. VEGETABLES, FRUITS, AND ORNAMENTALS AROUND THE HOME. 1969. AGDEX 200. A. H. Halcomb and others of Vocational Agriculture Supervisory Staff. Source: Agricultural Education Service - Field Office, Petric Hall, Auburn, Alabama 36890. A reference unit prepared for vocational agriculture teachers in Alabama for use with a series of seven television lessons related to each of the seven chapters in the publication. These chapters are Establishment and Care of Lawns; Growing Annual, Perennials, and Spring Flowering Plants; Maintenance and Care of Ornamental Plants; Small Fruit and Nut Production; Growing and Maintaining Fruit and Nut Trees Around the Home; Basic Factors in Successful Vegetable Gardening; and Specific Production Practices with Popular Garden Crops. (60 pp.) Price: \$ .50. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

16. A REFERENCE UNIT ON VEGETABLE PRODUCTION. 1969. AGDEX 250. Jasper S. Lee. Source: Curriculum Coordinating Unit, Agriculture Section, P. O. Drawer DX. State College, Mississippi 39762. Price: \$1.50. Available to state supervisors and head teacher educators at no charge for single copy.

17. PEPPER PRODUCTION, HS-30B. 1970. AGDEX 257. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in pepper production. Price: 1 copy free on request for State Directors of Agricultural Education.

18. TOMATO PRODUCTION, HS-30A. 1970. AGDEX 257. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in tomato production. Price: 1 copy free on request for State Directors of Agricultural Education.

19. FOLIAGE PLANT IDENTIFICATION--PART III. Slidefilm 612. 1970. AGDEX 270. K. N. Schumacher and R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 55 frames. The following information is shown along with the representative picture: (a) Common and scientific name, (b) Descriptive information, (c) Use, and (d) Cultural information. Price: \$3.25 postpaid when payment accompanies order. Available in quantity.

20. PRACTICE SET FOR FOLIAGE PLANT IDENTIFICATION--PART III. Slidefilm 612  
) 1970. K. N. Schumacher and R. L. Courson. Source: Vocational Agriculture

Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 39 frames. It supplements the slidefilm entitled "Foliage Plant Identification --Part III." Used as a text or summary: Presents a set of pictures of foliage plants for student's identification. It contains no script. Price: \$2.75 postpaid when payment accompanies order. Available in quantity.

21. ORNAMENTAL HORTICULTURE FOR VOCATIONAL AGRICULTURE IN ALABAMA. 1969. AGDEX 270. A. H. Halcomb and others of Vocational Agriculture Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A reference for the student who wants to study ornamental horticulture and for the teacher who wants to teach it. Primary purpose is to provide a reference for those advanced students choosing Ornamental Horticulture as their occupational objective. Contains units on Exploring Occupational Opportunities in Ornamental Horticulture; Identifying Ornamental Horticulture Plants; Plant Propagation; Using Soil and Other Plant Growing Media; Floral Crop Production; Nursery Crop Production; Controlling Plant Insects, Diseases, and Other Plant Disorders; Constructing, Maintaining, and Using Plant Growing Structures; Merchandising Horticulture Plants and Supplies; Developing the Landscape Design or Plan; Establishing and Caring for Lawns and Turfs. (350 pages). Price: \$2.50. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

22. DEMONSTRATIONS IN ORNAMENTAL HORTICULTURE. 1966. AGDEX 270/00. Raymond M. Clark, Arlynn D. Andersen, and Richard S. Lindstrom. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. This collection of demonstrations for use by teachers of ornamental horticulture. Each demonstration is outlined in terms of objectives, needed materials, procedures, and applications. Major topics covered include seed sowing and germination, rooting, potting and transplanting, propagation, cuttings, grafting, etc. A glossary of technical terms and a bibliography are provided. Price: \$1.25. Available in limited quantity. ERIC; See AIM Summer 1970.

23. STARTING THE HOME LANDSCAPE, HS-82. 1970. AGDEX 271. Robert Spillman and Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the landscaping area. Price: 1 copy free on request for State Directors of Agricultural Education.

24. MAINTAINING THE HOME LANDSCAPE, HS-83. 1970. AGDEX 271. Robert Spillman and Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the landscaping area. Price: 1 copy free on request for State Directors of Agricultural Education.

25. PLANNING THE HOME LANDSCAPE, HS-81. 1970. AGDEX 271. Robert Spillman and Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the landscaping area. Price: 1 copy free on request for State Directors of Agricultural Education.

26. MATERIALS FOR LANDSCAPING AND THEIR USES, Set of 40 slides in color. 1970. AGDEX 272. Department of Agricultural Education in cooperation with Don Hoag, Horticulture. Source: North Dakota Vocational Agriculture Association, Room 100, Morrill

Hall, North Dakota State University, Fargo, North Dakota 58102. Materials adapted for use in landscaping in Great Plains Area. Price: \$10.00. Available in limited quantity.

27. PRINCIPLES OF LANDSCAPING, Set of 27 slides in color. 1970. AGDEX 272. Department of Agricultural Education, NDSU in cooperation with Don Hoag, Horticulture. Source: North Dakota Vocational Agriculture Association, 100 Morrill Hall, North Dakota State University, Fargo, North Dakota 58102. Illustrates principles of landscaping for the home. Price: \$6.75. Available in limited quantity.

28. SOURCE UNIT IN ESTABLISHING AND MAINTAINING LAWNS AND TURF. 1970. AGDEX 273. Donald A. Bitting. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vocational Agriculture teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order.

29. GREENHOUSE PLANT PRODUCTION. 1967. AGDEX 280/15. Richard S. Lindstrom, Raymond M. Clark, and Theodore Falkenberg. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. This guide is designed for junior and senior high school teachers who are using projects in the greenhouse for teaching plant production. The material is organized in seven sections: introductory information, questions and answers, term identification, general crop culture, cool greenhouse operation plan, warm greenhouse operation plan, and lists of greenhouse suppliers and general references. Price \$1.50. Available in limited quantity. ERIC; See AIM Fall 1968.

30. PRODUCING POINSETTIAS COMMERCIALY. VAS 5013. 1970. AGDEX 282. R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject-matter unit discusses such things as: (1) Which Poinsettia Varieties Should I Grow? (2) How Do I Grow Stock Plants for Cuttings? (3) How Do I Propagate New Plants from Stock Plants? (4) When Should I Transplant Cuttings to Their Final Container? (5) How Do I Time Plants for Christmas Flowering? (6) What are Some Common Problems in Growing Poinsettias? and (7) How Should I Prepare the Plants for Sale? Price: \$ .15 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Spring 1971.

31. POINSETTIAS--CARE AND PROPAGATION. VAS 5011. 1970. AGDEX 282. R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 8-page subject-matter unit discusses the general care of poinsettias--including such items as fertilizing, disease and pest control, potting, pinching, and propagation. Price: \$ .10 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Spring 1971.

32. GERANIUM, 30 Color Slides and Illustrated Script. 1970. AGDEX 282. Karle Lucal. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. The following sections are included in the slide series: varieties, propagation, potting, commercial production, and uses. The slides may be used when working with the geranium in the school greenhouse or with the student's occupational experience program. Price: \$4.75. Available in quantity.

#### AGDEX 300 FORESTRY

33. MANAGEMENT OF FOREST RESOURCES FOR MULTIPLE USE--STUDENT RESOURCE UNIT. 1970. AGDEX 300/10. Quentin A. Hine and Norman K. Hoover. Source: 101 Agriculture Education Building, The Pennsylvania State University, University Park,

Pennsylvania 16802. A Student resource unit to be used in the high school agricultural program for management of forest resources for multiple use. Price: \$1.75. Available in limited quantity. ERIC; See AIM Spring 1971.

34. MANAGEMENT OF FOREST RESOURCES FOR MULTIPLE USE--TEACHER'S GUIDE. 1970. AGDEX 300/10. Quentin A. Hine, James H. Mortensen, Norman K. Hoover. Source: 101 Agriculture Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802. A teacher's guide of management of forest resources for high school agricultural programs. Price: \$1.25. Available in limited quantity. ERIC; See AIM 1971.

35. TREE IDENTIFICATION: WESTERN CONIFERS. 1970. AGDEX 300/33. Starr Jenkins. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Multi-media materials consisting of 20 color slides depicting 10 common Western conifers, overhead-transparency masters depicting the same conifers, and a brief printed description of each species. Ten slides show the species with name on screen, ten do not. Price: \$6.50. Available in quantity. ERIC; See AIM Fall 1970.

#### AGDEX 400 ANIMAL SCIENCE

36. SOURCE UNITS FOR ANIMAL SCIENCE. 1968. AGDEX 400/00. Raymond M. Clark, Clifford Haslick, Richard Karelse. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. Price: \$1.50. Available in limited quantity.

37. ANIMAL SCIENCE - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES. 1970. AGDEX 400/00. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 36 East South Temple, F 13, Salt Lake City, Utah 84111. For advanced students of vocational agriculture. Curricular level and student behavioral objectives are suggested for 12 instructional units in animal science. References are cited for each unit. The outline includes the following: a review of the importance of the livestock industry; Determining the job opportunities and job entry requirements in livestock production or industry; Selecting, judging, fitting, and showing livestock; Studying the anatomy and physiology of farm animals; Advanced feeding-animal nutrition; Keeping livestock healthy - controlling diseases and parasites; Breeding livestock - genetic factors; Buildings and equipment for livestock; Marketing livestock and livestock products; Identification, grading, and judging meat and livestock products; Managing livestock and keeping records; Providing occupational work experiences. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedure. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.

38. ANIMAL SCIENCE TRANSPARENCIES. 1970. AGDEX 400/00. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 34 8 1/2" x 11" transparencies, printed on .003" Trycite. It includes 26 transparencies on cattle, 5 on horses, 1 on sheep, and 2 on general livestock. The set also includes a white paper copy of each transparency for use in preparing duplicate copies and some text on the back for teacher use. Price: \$1.80 postpaid when payment accompanies order. Available in quantity.

39. RESOURCE UNIT ON LIVESTOCK HEALTH FOR CORE CURRICULUM. 1970. AGDEX 400/10. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
40. RESOURCE UNIT ON LIVESTOCK PRODUCTION MANAGEMENT FOR CORE CURRICULUM. 1970. AGDEX 400/10. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
41. LIVESTOCK BREEDING, 194 pp. Revised 1970. AGDEX 400/30. Roger Roediger. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. An illustrated student reference designed to assist students in gaining an understanding of important concepts in livestock breeding. Problems and exercises are used to provide opportunities for students to apply the concepts to realistic situations. Price: \$2.00. Available in quantity.
42. TRANSPARENCIES FOR ANIMAL BREEDING. 1970. AGDEX 400/30. Bob R. Stewart and Glen Shinn. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A set of 11 heavy weight transparencies and masters for Animal Breeding. Price: \$3.30 (including postage and handling). Available in limited quantity.
43. TRANSPARENCIES FOR LIVESTOCK SELECTION. 1970. AGDEX 400/40. Bob R. Stewart and James R. Oglesby. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A set of 27 heavy weight transparencies and copies of the masters for Livestock Selection including beef, sheep, swine, horses, and dairy. Price: \$8.10 (includes postage and handling). Available in limited quantity.
44. RESOURCE UNIT ON LIVESTOCK SELECTION FOR CORE CURRICULUM. 1970. AGDEX 400/40. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
45. ANIMAL NUTRITION I. 1970. AGDEX 400/50. Bob R. Stewart and Glen Shinn. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A 50 page unit on nutrition developed for teacher use. Included are student handouts and transparency masters. Price: \$1.00 (includes postage and handling). Available in limited quantity.
46. RESOURCE UNIT ON LIVESTOCK FEEDING FOR CORE CURRICULUM. 1970. AGDEX 400/50. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.
47. NUTRITIONAL GUIDE FOR STUDENTS IN VOCATIONAL AGRICULTURAL EDUCATION. 1970. AGDEX 400/50. Max L. Amberson and Buelon Moss. Source: Montana State University, Bozeman, Montana 59715. Price: \$1.50. Available in quantity.
48. SILAGE AS AN ANIMAL FEED. VAS 1043. 1970. AGDEX 400/61. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 8-page subject-matter unit discusses the use of silage for dairy cattle of cattle, sheep, and swine. Price: \$ .10 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Winter 1970.

49. MEAT JUDGING AND GRADING (Second Revision). 1970. AGDEX 400/84. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 28-page, 2-color 8 1/2" x 11" publication is a revision of a booklet by the same title. The list of cuts of meat was revised to make it conform to "101 Meat Cuts" by the National Livestock and Meat Board. Price: \$ .30 postpaid when payment accompanies order. Available in quantity.

50. WEST SYNDER FARM: SIMULATION OF A DAIRY FARM, TEACHER EDUCATION RESEARCH SERIES, Vol. 12, No. 1. 1970. AGDEX 410/10. S. M. Curtis and G. Z. Stevens. Source: Agricultural Education Department, The Pennsylvania State University, University Park, Pennsylvania 16802. Available in quantity.

51. GETTING STARTED IN DAIRYING, HS-47. 1969. AGDEX 410/20. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the Dairy Production area. Price: 1 copy free on request for State Directors of Agricultural Education.

52. MANAGING THE DAIRY HERD, HS-51. 1969. AGDEX 410/20. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the Dairy Production area. Price: 1 copy free on request for State Directors of Agricultural Education.

53. SOURCE UNITS FOR THE BEEF ENTERPRISE. 1967. AGDEX 420/00. Raymond M. Clark and Graydon Blank. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. The primary purpose is to provide vocational agriculture teachers with basic subject matter and to suggest a number of approaches through which an understanding and appreciation of the beef industry might be developed. The source units deal with topics such as managing the commercial beef herd, production testing, artificial insemination, feeding, feeder calf production, marketing, feed lot planning, health and sanitation, and beef industry occupations. Each unit suggests possible questions, problems, and activities for students. There is a selected bibliography. Price: \$1.50. Available in limited quantity.

54. BEEF PRODUCTION, HS-45. 1970. AGDEX 420/20. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the Beef Production area. Price: 1 copy free on request for State Directors of Agricultural Education.

55. SOURCE UNIT IN BREEDING BEEF PRODUCTION. 1970. AGDEX 420/20. James W. Facinelli. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vocational Agriculture teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Available in limited quantity.

56. SELECTING BEEF BREEDING ANIMALS, Slidefilm 100A. 1970. AGDEX 420/40. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 73 frames. It illustrates factors to keep in mind when selecting beef breeding animals. Price: \$3.90 postpaid when payment accompanies order. Available in quantity.

57. SHEARING SHEEP. Slidefilm 141A. 1970. AGDEX 430/26. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 73 frames. It illustrates the step-by-step operation of shearing sheep. Price: \$3.85 postpaid when payment accompanies order. Available in quantity.

58. BLOCKING AND TRIMMING SHEEP. Slidefilm 144. 1971. AGDEX 430/47. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 42 frames. It shows the equipment needed and step-by-step operation when blocking and trimming sheep for show. Price: \$2.85 postpaid when payment accompanies order. Available in quantity.

59. SHEEP BLOCKING AND TRIMMING TRANSPARENCIES. 1970. AGDEX 430/47. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 31 8 1/2" x 11" transparencies showing the various steps in blocking and trimming sheep for show. The set may be used to supplement subject-matter unit VAS 1044. Price: \$1.65 postpaid if payment accompanies order. Available in quantity.

60. BLOCKING AND TRIMMING SHEEP. VAS 1044. 1971. AGDEX 430/47. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 8-page subject-matter unit discusses the equipment needed and the steps involved in blocking and trimming a sheep for show. Price: \$ .10 postpaid when payment accompanies order. Available in quantity.

61. TRANSPARENCIES FOR SWINE. 1970. AGDEX 440. Bob R. Stewart and Billy Harrell. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A set of 36 heavy weight transparencies and masters for instruction in Swine. Price: \$10.80. Available in limited quantity.

62. SOURCE UNIT IN SWINE PRODUCTION. 1970. AGDEX 440/20. Alan H. Myers. Source: Dr I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vocational Agriculture teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Available in limited quantity.

63. BREEDS OF SWINE. Slidefilm 164A. 1971. AGDEX 440/30. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. Price: \$3.15 postpaid when payment accompanies order. Available in quantity.

64. BREEDS OF SWINE. VAS 1045. 1971. AGDEX 440/30. W. H. Witt. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject-matter unit illustrates and discusses eleven of the breeds of swine common to this country. Price: \$ .15 postpaid when payment accompanies order. Available in quantity.

65. APPRAISING MARKET HOGS FOR CARCASS MERIT. Slidefilm 169. 1971. AGDEX 440/40. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 46 frames. It illustrates hogs of different meatiness and a comparison of cuts from each. It is intended to help students appraise market hogs on their carcass cut-out value. This film is based on a set of slides developed by W. H. Bruner and B. D. VanStavern of The Ohio State University and distributed by the Ohio Agricultural Education Curriculum Materials Service. Price: \$3.00 postpaid when payment accompanies order. Available in quantity.

66. DIGESTION IN SWINE. Slidefilm 170. 1971. AGDEX 440/50. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 47 frames. It shows the step-by-step digestion process of the pig from the mouth to the large intestine. The film is based on a set of slides by James R. Foster, Animal Science Department, Purdue University, and distributed by the Ohio Agricultural Education Curriculum Materials Service, The Ohio State University. Price: \$3.00 postpaid when payment accompanies order. Available in quantity.

67. SOURCE UNITS FOR THE POULTRY INDUSTRY. 1965. AGDEX 450/00. Raymond M. Clark and Charles Sheppard. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. These source units were developed to help teachers of the subject increase the understandings and abilities of those intending to work in poultry production and related fields. Each unit presents objectives, questions, problems, and activities for the students. The topics covered include occupations in the poultry industry, feeding housing and production equipment, health of the poultry flock, broiler production, quality egg production, and becoming established in the poultry enterprise. There is a selected bibliography of additional sources. Price: \$1.50. Available in limited quantity.

#### AGDEX 500 SOILS

68. RESOURCE UNIT ON SOILS FOR CORE CURRICULUM. 1970. AGDEX 500. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

69. BASIC PRINCIPLES OF SOIL SCIENCE. 1970. AGDEX 500. C. E. Beeman and R. E. Caldwell. Source: Agricultural and Extension Education Section, 186 Norman Hall, University of Florida, Gainesville, Florida 32601. Principles basic to an understanding of proper soil management and use. Price: No charge. One copy to Head Teacher Educators and/or Instructional Materials Specialists only.

70. SOIL SCIENCE. 1970. AGDEX 500. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Set of overhead transparency masters, including overlays, for use with previously published teacher's handbook, Experiments in Soil Science, by Dr. Logan Carter. Also included is sheet referring to specific pages in handbook and suggestions for use. Price: \$1.95. Available in quantity. ERIC; See AIM Winter 1970.

71. AN ADAPTATION OF USDA SOIL CONSERVATION SERVICE TECHNICAL GUIDE, Vol. 8, No. 1. 1970. AGDEX 510. Samuel M. Curtis and G. Z. Stevens. Source: 101 Agriculture Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802. For use by students in high schools or area schools studying production in agriculture with special emphasis for adult farmers. Farm Soil Capability Map-SCS. Price: \$1.25. Available in limited quantity.

72. TILLAGE FOR PROFIT. 1970. AGDEX 516. J. A. Jensen and Virgil Weiser, Specialists, Extension Service, NDSU. Source: North Dakota Vocational Agriculture Association, Room 100 Morrill Hall, North Dakota State University, Fargo, North Dakota 58102. Set of 84 transparency masters. Information best adapted for use in Northern Great Plains area. Price: \$8.40. Available in quantity.

73. UNDERSTANDING THE NATURE AND IMPORTANCE OF SOIL. Publication AP-1. 1970. AGDEX 520. Claude E. Richard. Source: Agricultural Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. A lesson outline

for use by teachers in developing their teaching plan for teaching this unit. Price: No charge. Single copy available to state staff upon request. Not available from source.

74. DETERMINING LAND CAPABILITY CLASSES. Publication AP-2. 1970. AGDEX 520. Claude E. Richard. Source: Agricultural Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. A lesson outline for use by teachers in developing their teaching plan for teaching this unit. Price: No charge. Single copy available to state staff upon request. Not available from source.

75. DEVELOPING A SOIL AND WATER CONSERVATION PLAN. Publication AP-4. 1970. AGDEX 570. Claude E. Richard. Source: Agricultural Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. A lesson outline for use by teachers in developing their teaching plan for teaching this unit. Price: No charge. Single copy available to state staff upon request. Not available from source.

#### AGDEX 600 DISEASES AND PESTS

76. RESOURCE UNIT ON INSECTS FOR CORE CURRICULUM. 1970. AGDEX 610. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

77. IDENTIFICATION OF WEED SEEDLINGS, BROADLEAVES -- PART I. Slidefilm 800. 1970. AGDEX 640. R. L. Courson and M. D. McGlamery. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 45 frames. It shows the emerging seedling, identifying characteristics, and the mature plant. Ten common weeds are discussed. Price: \$2.95 postpaid when payment accompanies order. Available in quantity.

78. IDENTIFICATION OF WEED SEEDLINGS, BROADLEAVES -- PART II. Slidefilm 801. 1970. AGDEX 640. R. L. Courson and M. D. McGlamery. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 45 frames. It discusses identifying characteristics of the emerging seedling and also shows the mature plant. Ten common weeds are shown. Price: \$2.95 postpaid when payment accompanies order. Available in quantity.

79. AGRICULTURAL WEED IDENTIFICATION. 1970. AGDEX 640. George Gowgani. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Set of 40 slides depicting ten typical weeds of importance in the Western United States. Each weed is pictured in four slides that emphasize its unique features and typical appearance. An illustrated manual accompanies the slides with printed explanation for each slide. Designed to follow the sound filmstrip, Agricultural Weed Identification, although it can be used independently as well. Price: \$8.50. Available in quantity.

80. RESOURCE UNIT ON WEEDS FOR CORE CURRICULUM. 1970. AGDEX 640. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

81. WEED CONTROL TRANSPARENCIES AND MASTERS. 1970. AGDEX 641. Harlan E. Ridenour. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 46 black and white transparencies which are ready for use with the overhead projector. The series is designed to accompany the Weed Control, Cultural and Chemical available from the same source. The master

sheets included with the series have a description and page reference to the book printed on the reverse side. Price: \$6.75. Available in quantity. ERIC; See AIM Spring 1971.

82. AGRICULTURAL WEED CONTROL. 1970. AGDEX 641. George Gowgani. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Sound filmstrip, in color, that explains basic methods of weed control. Special attention is given to types of weeds, i. e., annuals, biennials, grasses, brushes, etc., and how they differ. Designed to precede slide set Agricultural Weed Identification. Filmstrip, illustrated script, and taped narration in set. Price: \$7.50. Available in quantity.

83. AGRICULTURAL CHEMICALS-HERBICIDES. 1970. AGDEX 641. Gary L. Cockram and John R. Crukilton. Source: Agricultural Education Division, Department of Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. These materials consist of six individual lessons for teacher use which were developed in conjunction with six educational television lessons for young and adult farmers. The six lessons are: (1) Importance of Herbicides and Control Practices for Corn, (2) Methods of Weed Control and Control Practices for Forage Crops and Soybeans, (3) Selecting Herbicides and Control Practices for Lawns and Turfs and Tobacco, (4) Herbicide Application Equipment, (5) Control Practices for Small Grains, Gardens, and Speciality Areas, (6) Safety-Legal Considerations and Control Practices for Pastures and Peanuts. Price: No charge. One copy will be supplied to state staff upon request. Not available from source.

#### AGDEX 700 AGRICULTURAL ENGINEERING

84. AGRICULTURAL WEIGHTS AND MEASUREMENTS, HS-52. 1969. AGDEX 700. Billy J. Vice. Source: Instructional Materials Laboratory, Room 151 Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the Agricultural Mechanics area. Price: 1 copy free on request for State Directors of Agricultural Education.

85. AUDIO-VISUAL AIDS FOR TEACHING AGRICULTURAL MECHANICS. 1969. AGDEX 701. A. H. Halcomb and others of Vocational Agriculture Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A listing and source of films, filmstrips, and slides suitable for use in teaching agricultural mechanics. (14 pages). Price: \$ .25. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

86. RESOURCE UNIT ON CONSTRUCTION AND MAINTENANCE SKILLS FOR CORE CURRICULUM. 1970. AGDEX 710. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity.

87. RECOMMENDED PRACTICES FOR BUILDING WITH CONCRETE MASONRY. VAS 3034. 1970. AGDEX 715. R. F. Espenschied. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a 16-page subject-matter unit which discusses the procedures for laying out buildings, construction footings, mixing mortar, laying the first course, laying up corners, building walls, tooling masonry joints and special masonry applications. This unit has many illustrations to illustrate techniques of laying concrete masonry. Price: \$ .20 postpaid when payment accompanies order. Available in quantity.

88. SOURCE UNIT IN CONCRETE WORK. 1970. AGDEX 715. Ronald L. Preston. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vocational Agriculture teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order.
89. QUALITY CONCRETE FILMSTRIPS. 1970. AGDEX 715. Iowa Vocational Agriculture Teacher's Association, Missouri Vocational Agriculture Teacher's Association, Portland Cement Association. Source: Thomas A. Hoerner, Agricultural Engineering Department, Iowa State University, Ames, Iowa 50010. This set contains 3 filmstrips with scripts, titles are: Selecting, Proportioning and Mixing Materials for Quality Concrete, 83 frames; Placing Finishing and Curing Concrete Slabs, 143 frames; and How to Lay Concrete Blocks, 116 frames. Price: \$12.00, payable to Iowa Vocational Agriculture Teacher's Association. Available in quantity.
90. TIRES FOR FARM EQUIPMENT. VAS 3031. 1970. AGDEX 740. R. F. Espenschied. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 20-page subject-matter unit discusses farm tires; types of agricultural tires available; sizes, grades and ratings; importance of proper inflation; causes of damage; steps in mounting and demounting tires and tire maintenance suggestions. Price: \$ .25 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Winter 1970.
91. COURSE OF STUDY IN AGRICULTURAL MACHINERY AND EQUIPMENT. 1970. AGDEX 740. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agriculture Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. A course outline with instructional units and references for advanced students of vocational agriculture. Curricular level and behavioral level objectives are suggested for eight instructional units in agricultural machinery. References are cited for each unit. The outline includes the following: Exploring opportunities, Determining job entry requirements, and providing for occupational experiences; Meeting safety standards; Selecting and purchasing agricultural machinery; Assembling agricultural machinery and equipment; Making inventories; Check for needed repairs on used machines; Operate, adjust, service, and repair tillage, planting, fertilizing, and harvesting machinery; Lubricate farm machinery; Operate maintain and repair materials handling equipment. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teacher of vocational agriculture. Price: No charge. Available in limited quantity.
92. RESOURCE UNIT ON POWER AND MACHINERY FOR CORE CURRICULUM. 1970. AGDEX 740. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in quantity. ERIC; See AIM Spring 1971.
93. POWER MECHANICS. 1970. AGDEX 760. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agriculture Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. A course outline with instructional units and references for advanced students of vocational agriculture. Curricular level and student behavioral objectives are suggested for 12 instructional units in power mechanics in agriculture. References are cited for each unit. The outline includes the following: Exploring careers in agricultural power mechanics operations and exploring job entry requirements, Meeting the safety standards in agricultural power mechanics; Principles of

operation of internal combustion engines; Identifying small engine parts and making essential repairs on small engines; Testing and diagnosing engines before repairing them; Cooling and lubricating engines; Checking the electrical systems on engines, post-repair testing and tuning engines; Studying and servicing clutches, transmissions, and drives; Learning the principles and parts of hydraulic systems and how they operate; Maintaining and safety operating a tractor; Selecting, operating, and servicing electric motors. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.

94. SMALL ENGINES (TRANSPARENCY MASTERS). Cat. No. M 108 and M 109. 1970. AGDEX 761. Source: American Association for Vocational Instructional Materials, Agricultural Engineering Center, Athens, Georgia 30601. These masters are selected from key illustrations in the manual Small Engines--Care, Operation, Maintenance and Repair. They are intended for use in conjunction with the manual. A discussion of each illustration is found in the manual under the corresponding figure number. More explanation is also given in the text. Price: Vol. I (84 masters) \$6.30 per set (M 108); Vol. II (88 masters) \$6.30 (M 108). Available in quantity.

95. ELECTRICAL FUNDAMENTALS USEFUL IN ENGINE ANALYSIS. VAS 3032. 1970. AGDEX 761. R. F. Espenschied. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 20-page subject-matter unit discusses basic fundamentals of electricity, magnets and magnetism, and electrical measuring instruments used in checking electrical circuits. Price: \$ .25 postpaid when payment accompanies order. Available in quantity.

96. INTERNAL COMBUSTION ENGINES. Revised 1970. AGDEX 761. Curtis R. Weston, et. al. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A guide prepared for teacher use which includes motivational procedures, references, study questions, and a summary of information. Price: \$3.00 (includes postage and handling). Available in quantity.

97. SKILL SHEETS FOR SMALL GASOLINE ENGINES. 1970. AGDEX 761. Thomas A. Hoerner. Source: Thomas A. Hoerner, Agricultural Engineering Department, Iowa State University, Ames, Iowa 50010. This booklet contains 20 skill sheets related to instruction in small gasoline engines. Each skill sheet deals with an individual skill and contains: part identification, procedures, abilities and understanding taught and an evaluation score sheet. Price: \$1.50, payable to Agricultural Engineering Department. Available in quantity.

98. TRACTOR SAFETY TRANSPARENCIES. 1970. AGDEX 762. R. F. Espenschied. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 40 instructional illustrations printed on .003' Trycite plastic for overhead projection. Each transparency is accompanied by a printed paper copy with some explanation on the back. The set is contained in a manila pocket folder with the title stamped on the flap. This is a set of humorous illustrations of tractor hazards that should maintain student interest in this subject. There are transparencies on starting, hitching, maintenance, belt work, road work operation and general use of tractors. Price: \$2.10 postpaid when payment accompanies order. Available in quantity.

99. SELECTING AND STORING TRACTOR FUELS AND LUBRICANTS (TRANSPARENCY MASTERS). Cat. No. M 102. 1970. AGDEX 763. Source: American Association for Vocational Instructional Materials, 120 Agricultural Engineering Center, Athens, Georgia 30601. A set of 58 illustrations taken from the text of the same title. Price: \$5.60. Available in quantity.

100. **INDIVIDUAL STUDY GUIDE ON CARBURETION**, 112 pp. 1970. AGDEX 763. Wiley B. Lewis. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. An individual study guide designed for students in farm power courses. The student is given assignments, information to provide technical information, and projects to provide practical experience. The book is illustrated with line drawings and pictures. Price: \$1.50. Available in quantity. ERIC; See AIM Summer 1970.

101. **INDIVIDUAL STUDY GUIDE ON ELECTRICAL SYSTEMS FOR SPARK-IGNITION ENGINES**, 212 pp. 1970. AGDEX 763. Wiley B. Lewis. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. An individual study guide designed for students in farm power courses. The student is given assignments, information to provide technical knowledge, and projects to provide practical experience. The book is illustrated with line drawings and pictures. Price: \$2.50. Available in quantity. ERIC; See AIM Spring 1971.

102. **SELECTING AND STORING TRACTOR FUELS AND LUBRICANTS**. Cat. No. 102. 1970. AGDEX 763. G. E. Henderson, Harold W. Parady, George W. Smith, et al. Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. Contents: Fuel ratings; Compression ratios; Fuel grades; Contaminants; Fuel storage; Storage losses; Safety; Cost of Storages; Maintenance; Lubricants: oil types, oil grades, additives, affects on engine, gear oils, hydraulic oils, greases, lubricant storage. Price: \$2.40. Available in quantity.

103. **TRACTOR MAINTENANCE PRINCIPLES AND PROCEDURES**. Cat. No. 104. 1970. AGDEX 763. Harold W. Parady, George W. Smith, et al. Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. Contents: Servicing, maintaining, adjusting: batteries, V-belts, oil filters, crankcase, ventilators, hydraulic units, tires, valves, spark plugs, fuel filters, carburetors, brakes, clutches, distributors, dry-type air cleaners, starters and generators, front-wheels and cooling systems. Engine timing, tractor cleaning, lubrication of: starter, generator, steering, transmission, differential and power take-off. Winter storage procedures. Price: \$5.60. Available in quantity. ERIC; See AIM Spring 1971.

104. **TRACTOR HYDRAULICS FOR VOCATIONAL AGRICULTURE, STUDENT WORKBOOK AND TEACHER RESOURCE UNIT**. 1970. AGDEX 764. Brian Ingvalson and Forrest Bear. Source: Bulletin Room, College of Agriculture, University of Minnesota, St. Paul, Minnesota 55101. Price: 1 Resource and 15 Student Workbooks, \$9.00; 1 Resource and 20 Student Workbooks, \$12.00. Available in quantity.

105. **UNDERSTANDING ELECTRICITY AND ELECTRICAL TERMS**. Cat. No. 303. 1970. AGDEX 770. G. E. Henderson, James Wren, et al. Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. For those who know little or nothing about electricity, but would like a working knowledge of it. Terms are explained, then used in practical illustrations to show their value in an everyday understanding of electricity. The discussion also deals with rates and how electrical energy is purchased. Contents: Circuits, Voltage, Amperage, Watts, Direct current, Alternating current, Conductors, Insulators, Resistance, Single phase, 3-phase, Kilowatt hours, Metering methods, Rates, Rate applications. Price: \$1.30. Available in quantity.

106. **RESOURCE UNIT ON ELECTRIC POWER FOR CORE CURRICULUM**. 1970. AGDEX 770. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

107. IDENTIFICATION OF ELECTRIC WIRING ITEMS. Slidefilm 404B. 1970. AGDEX 772. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 66 frames. It is useful to Illinois teachers when unpacking and checking items contained in the Vocational Agriculture Service Electrical Wiring Loan Box. It is also helpful in teaching identification of commonly used electrical items. Price: \$3.60 postpaid when payment accompanies order. Available in quantity.
108. AGRICULTURE SHOP SAFETY - TEACHER'S GUIDE, 41 pp. 1970. AGDEX 780. Source: Media Center, Clemson University, Clemson, South Carolina 29631. A manual for the teacher on shop safety illustrating how to teach safety including both hand tools and power equipment. Price: For quantity prices contact Media Center. Available in quantity.
109. AGRICULTURAL SHOP SAFETY - STUDENT MANUAL, 61 pp. 1970. AGDEX 780. Source: Media Center, Clemson University, Clemson, South Carolina 29631. Publication is for the student. Well illustrated for the safe use of power equipment and hand tools. Price: For quantity prices, contact Media Center. Available in quantity.
110. WEIGHTS AND MEASURES. 1970. AGDEX 780. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Set of overhead transparency masters, some with overlays, that visualize the various units of measurement used in agriculture, i. e., rod, acre, apothecary's measure (for veterinary medicines), chain, hand, etc. Especially useful with overhead transparency set, Land Measurement, produced in previous year. Price: \$1.65. Available in quantity. ERIC; See AIM Winter 1970.
111. AGRICULTURAL SHOP SKILLS - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES. 1970. AGDEX 780. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. For first year students of vocational agriculture. Curriculum level and student behavioral objectives are suggested for 11 instructional units in agricultural shop skills. References are cited for each unit. The outline includes the following units: Work safety; Selection, care and use of hand tools; Selection, care and use of power tools; Sketching and drawing; figuring bills of material; Cold metal work; Hot metal work; Gas welding and cutting; Arc welding; Basic Electricity; FFA leadership; and keeping records. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. It is the only course outline (of the nine) that includes the instructional units on FFA and record keeping. Price: No charge. Available in limited quantity.
112. ADVANCED SHOP GUIDE FOR VO-AG STUDENTS. 1969. AGDEX 780. A. H. Halcomb and others of Vo Ag Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A reference-workbook for teachers and students. Contains units on Arc welding, Farm Plumbing, Small Gasoline Engines, Power Woodworking Tools, Farm Electricity, Acetylene Welding, Painting Farm Machinery, Hot and Cold Metal Work. Recommended for use in 11th and 12th grades. 189 pp. Price: \$1.00. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.
113. PLANS FOR AGRICULTURAL MECHANICS LABORATORY IMPROVEMENT AND HELPFUL STUDENT PROJECTS. Vol. II, No. 4t. 1970. AGDEX 780. H. Hoerner. Source: Agricultural Education Department, The Pennsylvania State University, University Park, Pennsylvania 16802. Price \$ .50. Available in quantity.

114. GENERAL SHOP GUIDE FOR VO-AG STUDENTS. 1969. AGDEX 780. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service-Field Office, Petrie Hall, Auburn, Alabama 36890. A reference-workbook for teachers and students. Contains units on Shop Safety, Wood Joint and Hardware, Hand Tool Identification, Use of Hand Tools, Sketching and Drawing, Woodworking, Farm Electricity, Sheet Metal and Soldering, Painting and Glazing, Concrete Work, Identification and Use of Power Tools, Introduction of Farm Electric Welding, Simple Plumbing. Recommended for use in 9th and 10th grades. (179 pages). Price: \$1.00. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.
115. STOCK TRAILER PLANS. AGDEX 781. Milton Osgood, Graduate Student. Source: Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. Price: \$ .25. Available in limited quantity.
116. SHOP MADE LAMB PRODUCTION TESTING SCALE. AGDEX 781. Larry Chrch, Graduate Student. Source: Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. Price: \$ .25. Available in limited quantity.
117. SHOP MADE PORTABLE TRIMMING CHUTE FOR LIVESTOCK PROJECTS. AGDEX 781. Wayne Borgan, Graduate Student. Source: Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. Price: \$ .25. Available in limited quantity.
118. SHOP PROJECT PLANS FOR TEACHING AGRICULTURAL MECHANICS, Ag. Ed. Series, Volume 3, No. 1. 1970. AGDEX 781. Curtis R. Weston and Fred Oomens. Source: Instructional Materials Laboratory, Room 8, Industrial Education, University of Missouri, Columbia, Missouri 65201. The publication contains a listing of shop plans available in Agricultural Mechanics. Included is the plan order number, source, and cost of each plan. Price: \$2.00 (includes postage and handling). Available in quantity.
119. AUGER UNLOADING WAGON, Ag. Ed. Series, Volume 3, No. 4. 1970. AGDEX 781. Curtis R. Weston, Jesse Clonts, Richard Linhardt. Source: Instructional Materials Laboratory, Room 8, Industrial Education, University of Missouri, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing an auger wagon. Price: \$1.00 (includes postage and handling). Available in quantity.
120. HOW TO BUILD A TRAILER LOADING CHUTE, Ag. Ed. Series, Volume 3, No. 3. 1970. AGDEX 781. Curtis R. Weston. Source: Instructional Materials Laboratory, Room 8, Industrial Education, University of Missouri, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing a trailer loading chute. Price: \$1.00 (includes postage and handling). Available in quantity.
121. TOOL IDENTIFICATION. Revised 1970. Frank Coyes. AGDEX 782. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Complete manual consists of pictures and descriptions of more than 300 tools and related materials used in agricultural mechanics. Picture section has tools pictured with blanks for names to be filled in; useful for student workbook and for testing. Price: Complete manual, \$1.50; picture section only, \$ .40. Available in quantity. ERIC; See AIM Winter 1970.
122. POWER MACHINE WORK BOOK, 28 pp. 1970. AGDEX 782. Source: Media Center, Clemson University, Clemson, South Carolina 29631. Price: For quantity prices, contact Media Center. Available in quantity.

123. READING THE MICROMETER, 3 pp. 1970. AGDEX 782. Source: Media Center, Clemson University, Clemson, South Carolina 29631. This describes how to learn to use the Micrometer. Price: For quantity prices, contact Media Center. Available in quantity.

124. SOURCE UNIT IN TOOL FILLING. 1970. AGDEX 782. Tom Ball. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quality.

125. SOURCE UNIT IN HOT AND COLD METAL WORK. 1970. AGDEX 785. Tom Ball. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quantity.

126. SOURCE UNIT IN OXY-ACETYLENE WELDING. 1970. AGDEX 785. Tom Ball. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quantity.

127. SOURCE UNIT IN OXY-ACETYLENE WELDING. 1970. AGDEX 785. Tom Ball. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quantity.

128. SOURCE UNIT IN ARC WELDING. 1970. AGDEX 785. Tom Ball. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quantity.

129. SOURCE UNIT IN FORGING. 1970. AGDEX 785. Larry R. Siegfried. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quality.

130. SPOT WELDING FOR AGRICULTURAL MECHANICS SHOPS. VAS 3: 1970. AGDEX 785. R. F. Espenschied. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject-matter unit discusses the principles of spot welding and installation procedures for spot welders. It discusses spot welding various metals and maintenance procedures to follow for satisfactory service. Price: \$ .15 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Winter 1970.

131. METALS AND WELDING - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES. 1970. AGDEX 785. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 3, Salt Lake City, Utah 84111. For advanced students of vocational

agriculture. Curricular level and student behavioral objectives are suggested for 11 instructional units in metals and welding. References are cited for each unit. The outline includes the following units: Determining job entry requirements in welding and metal fabrication; Meeting safety requirements, Identifying metals; Reading blueprints and job instruction sheets; Setting up and using oxyacetylene equipment; Setting up DC and AC welders and using arc welding equipment; Setting up work and equipment and operating the inert gas-arc combination welders; Working with sheet metal; Operating a metal lathe; Heating, shaping, annealing, and tempering metals; Repairing agricultural machinery and equipment and building essential metal projects. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.

#### AGDEX 800 AGRICULTURAL ECONOMICS

132. AN INTRODUCTION TO FARM MANAGEMENT PRINCIPLES. 1969. AGDEX 810. Virgil VandeWalle in cooperation with Dr. Carl Olson, NDSU. Source: North Dakota Vocational Agriculture Association, Room 100 Morrill Hall, North Dakota State University, Fargo, North Dakota 58102. A resource unit for use in teaching Vocational Agriculture III and IV, printed, 127 pp. Price: \$6.50. Available in limited quantity.

133. MISCELLANEOUS FARM AND RANCH FIGURES. 1970. AGDEX 810. Eldon R. Reynolds. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit of one copy per order. Available in limited quantity.

134. PLANNING TO HAVE AN ADEQUATE SIZE OF BUSINESS. VAS 2013a. 1971. AGDEX 811. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 8-page subject-matter unit is one in a series on Farm Planning. It contains the following subdivisions: (1) What Size of Business; (2) How Can Size of Business be Increased; and (3) Size of Business for the Problem Farm. Price: \$ .10 postpaid when payment accompanies order. Available in quantity.

135. PLANNING A PROFITABLE FARM BUSINESS. VAS 2001b. 1971. AGDEX 811. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 4-page subject-matter unit can be used separately or along with the planning booklet, Planning Your Farm Business. The unit serves as an introduction to the topic of Farm Planning. Subdivisions of the unit relate to: (1) What Resources are Used in Farm Production; (2) Farm Planning and Farm Management; and (3) The Steps in Farm Planning. Price: \$ .05 postpaid when payment accompanies order. Available in quantity.

136. PROBLEM ILLUSTRATION FOR PLANNING YOUR FARM BUSINESS. 1970. AGDEX 811. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This material is designed to be used with the planning booklet, "Planning Your Farm Business." It includes a 1-page problem, along with an 11-page illustration of how to fill in the booklet to estimate farm and family earnings under a new plan. The problem can be detached from the illustration, or duplicated by teachers, for providing practice in using the booklet. The illustration can be given to students after they have finished. Price: \$ .10 postpaid when payment accompanies order. Available in quantity.

137. FARM BUSINESS PLANNING AND ANALYSIS FILING SYSTEM, 6 pp. Revised 1971. AGDEX 818. Homer Brown and Paul Freeman. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Six page instruction manual and four sheets of color coded gummed labels. The filing system is designed to assist farmers in organizing and filing for ready reference the many papers that are associated with farm record keeping and the analyzing and planning of the farm business. Price: \$1.25. Available in quantity.

138. PROBLEM AND KEY FOR THE ILLINOIS FARM RECORD BOOK. 1970. AGDEX 818. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. The 8-page problem and key of 32 double pages were prepared to be used especially with the Illinois Farm Record Book. However, the key can be used as an illustration of a completed farm record, along with calculations of various analysis measures. It can be used with high school students or adult or young farmers. Price: Pack of 10 problems, \$ .60; Key, single copy, \$ .50. Postpaid when payment accompanies order. Available in quantity.

139. STANDARDS FOR MEASURES OF EFFICIENCY, 1970. 1971. AGDEX 818. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 6-page item is made available each year to serve as a means of comparison for records of adult farmers and for enterprises in students' farming programs. Standards for physical measures are taken from the preceding year's results from farmers enrolled in the Illinois Farm Business Management Service. Current prices and costs are then applied to obtain income estimates. Price: Pack of 10 \$ .60 when payment accompanies order. Available in quantity.

140. RESOURCE UNIT ON FARM-FIRM RECORDS. 1970. AGDEX 818. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 8: .21. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

141. KEEPING AGRICULTURAL RECORDS, 41 pp. 1970. AGDEX 818. Source: Media Center, Clemson University, Clemson, South Carolina 29631. This consists of: (1) A unit, or series of lessons on keeping Agricultural records, (2) Transparencies for group instruction, (3) Additional sheets for student work. Price: For quantity prices, contact Media Center. Available in quantity.

142. PROFIT-MAXIMIZING PRINCIPLES, INSTRUCTIONAL UNITS FOR VOCATIONAL AGRICULTURE, 127 pp. Revised 1970. Edited by Richard L. Barker, Revised by Richard A. Reid. AGDEX 820. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Six profit-maximizing principles are included in this teacher's guide. Illustrations are presented for each of the six principles to be taught. In studying the illustrations the students should achieve an understanding of the principles and their application to decision making. The study should strengthen the student's managerial ability. He will know why as well as how and what. Price: \$2.00. Available in quantity.

143. EDUCATION REGARDING CREDIT FOR AGRICULTURAL PRODUCTION, TEACHING SOURCE UNITS. 1970. AGDEX 832. Lloyd J. Phipps, C. Eugene McGrew, Michael J. Still. Source: Agricultural Education Division, 357 Education Building, University of Illinois, Urbana, Illinois 61801. A packet of 5 teaching source units: Unit I-1, Inventorying Resources of the Farm Business; Unit I-2, Recording Farm Business Receipts, Expenses, and Production; Unit I-3, Analyzing Farm Business Records and Interpreting Results; Unit I-4, Preparing and Interpreting a Profit and Loss Statement; Unit I-5, Preparing and Interpreting a Net-Worth Statement. Price: \$ .50/unit; \$2.50 for packet of 5. Available in quantity.

144. AGRICULTURAL BUSINESSES IN THE AMERICAN ECONOMIC SYSTEM, HS-76. 1969. AGDEX 835. Wilson Glenn Collins. Source: Instructional Materials Laboratory, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in the Agricultural Business area. Price: Not for sale. 1 copy free on request for State Directors of Agricultural Education.

#### AGDEX 900 AGRICULTURAL OCCUPATIONS

145. WORK EXPERIENCE PROGRAMS IN VOCATIONAL AGRIBUSINESS. 1969. AGDEX 900. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A listing of possible activities and areas (on-campus and off-campus) where students could gain work experience in their occupational objectives. (10 pages). Price: \$ .25. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

146. COOPERATIVE OCCUPATIONAL EXPERIENCE IN VOCATIONAL AGRICULTURE AND RURAL INDUSTRIES. 1969. AGDEX 900. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A booklet developed to help teachers in selecting, placing and supervising cooperative work experience programs in vocational agriculture. It covers such subjects as school operated facilities, placement for cooperative occupational experience, suggested training stations, rules to follow in placing students, and legal provision. (11 pages). Price: \$ .25. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

147. AGRICULTURAL MATHEMATICS IN VOCATIONAL AGRICULTURE. 1969. AGDEX 900. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. The purpose of this publication is to present material for reviewing basic arithmetic skills and to make application of these skills in solving practical problems that most individuals face. Problems are based on building supplies, land measurement, interest on borrowed capital and consumer credit. (14 pages). Price: \$ .25. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

148. AGRICULTURE OCCUPATIONAL CLUSTER GUIDE. 1970. AGDEX 900/00. Curtis E. Loewen, Oregon Vocational Agriculture Teachers and Representatives of the Agricultural Industry. Source: Oregon Board of Education, Salem, Oregon 97310. A guide designed to provide qualified agriculture teachers with a compilation of recommended competencies and learning activities which will prepare students for entry-level employment or advanced training in agricultural occupations which, on analysis, reflected the largest employment potential (by 1975) in Oregon. Price: \$2.50. Available in limited quantity.

149. CAREERS I. 1970. AGDEX 900/00. Bob R. Stewart and Venton Haskins. Source: Instructional Materials Laboratory, Room 8, Industrial Education, University of Missouri, Columbia, Missouri 65201. A 46-page unit on careers designed for teacher use. Included are suggested student handouts and eight transparency masters. Price: \$1.00 (includes handling and postage). Available in limited quantity.

150. TRANSPARENCIES FOR CAREERS I. 1970. AGDEX 900/00. Bob R. Stewart and Venton Haskins. Source: Instructional Materials Laboratory, Room 8, Industrial Education, University of Missouri, Columbia, Missouri 65201. A set of eight heavy

weight transparencies and copies of the transparency masters for Careers I. Price: \$2.40 (includes postage and handling). Available in limited quantity.

151. COURSE OUTLINE FOR SPECIALIZED AGRIBUSINESS INDUSTRY (TWELFTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. This is an advanced specialized study and shop practice in the Agribusiness industry course. Common units are listed in this outline. (17 pages). Price: \$ .30. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

152. COURSE OUTLINE FOR BASIC AGRIBUSINESS (TENTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A study of basic fundamentals and basic shop practices in the Agribusiness industry. Occupational objectives areas of the Agribusiness industry are covered as selected by individual students in the class. This course provides gradual in-depth study of the Agribusiness industry. (37 pages). Price: \$ .50. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

153. COURSE OUTLINE FOR BASIC AGRIBUSINESS (EIGHTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A course to explore the work opportunities and requirements in elementary agribusiness, industry, and other occupations. Students are given a general picture of agriculture and industry and receive elementary laboratory experiences in the many areas of the World of Work. (22 pages). Price: \$ .30. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

154. COURSE OUTLINE FOR SPECIALIZED AGRIBUSINESS INDUSTRY (ELEVENTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. This is a specialized study and shop practice of the Agribusiness industry. Units that are deemed common to all students in the class are listed in this outline. (11 pages). Price: \$ .25. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

155. COURSE OUTLINE FOR VOCATIONAL ORIENTATION (NINTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A study of occupational subject-matter and skill requirements of agriculture and industry by all students, including practice on a rotating basis, of some shop skills needed in the following occupational areas; Agricultural Production, Agricultural Supplies, Agricultural Mechanics, Agricultural Products, Ornamental Horticulture, Agricultural Resources, Forestry, Metalworking, Woodworking, Masonry, Building Construction, Power Mechanics, and Electricity. (30 pages). Price: \$ .50. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

156. COURSE OUTLINE FOR INTRODUCTION TO OCCUPATIONS (SEVENTH GRADE). 1969. AGDEX 900/00. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. An introductory course to the World of Work including broad occupational information for many occupations. A beginner's course in vocational arts and elementary life science. Simple arts and skills are studied and practiced. (16 pages). Price: \$ .30. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

157. COURSE OF STUDY IN AGRIBUSINESS - A COURSE OUTLINE WITH INSTRUCTIONAL UNITS AND REFERENCES. 1970. AGDEX 900/00. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. For advanced students of vocational agriculture. Curricular level and student behavioral objectives are suggested for six instructional units in agribusiness. References are cited for each unit. The outline includes the following: Exploring careers in agribusiness; Preparing for employment; Establishing and maintaining favorable human relations; Understanding business organizations; Understanding operations of a business; Placing for occupational work experience. Sub-headings are: Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.

158. OCCUPATIONAL OPPORTUNITIES AND TRAINING NEEDS FOR AGRICULTURAL EMPLOYMENT IN SELECTED AREAS OF ARIZONA. 1969. AGDEX 900/00. J. B. Hamilton. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. A Comprehensive Analysis of Agricultural Occupations Opportunities in Agriculture. Both on-farm and off-farm occupations were studied to determine job opportunities and training needs in the broad spectrum of agricultural occupation. Price: Free as long as supply lasts. Available in limited quantity. ERIC: See AIM Spring 1971.

159. RESOURCE UNIT ON CAREER OPPORTUNITIES IN AGRICULTURE. 1970. AGDEX 900/00. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

160. AGRI-BUSINESS--IS IT FOR ME. 1971. AGDEX 900/00. William Diley. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. For use in presenting Agri-Business programs to new and prospective students. Defines the program and the role of the student, the school, and the employer. Price: 1-10 copies, 25¢ each; 11-49 copies, 20¢ each; 50 or more copies, 15¢ each. Available in quantity.

161. INTRODUCTION TO THE WORLD OF WORK AND EXPLORING THE WORLD OF WORK. 1970. AGDEX 900/00. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. Course outlines for 7th and 8th grade introduction to vocations and the World of Work. Price: No charge. Available only to Head Teacher Educators and State Supervisors.

162. PROFILES FOR AGRICULTURAL OCCUPATIONS INTEREST SCALE. 1970. AGDEX 900/01. W. H. Hamilton. Source: W. H. Hamilton, Purdue University, SCC "G", Lafayette, Indiana 47907. High School and Junior High School Percentile Profile Sheets for Boys and Girls. Price: No charge. Available in limited quantity.

163. VOCATIONAL COMPETENCIES NEEDED FOR EMPLOYMENT IN THE AGRICULTURAL-CHEMICAL INDUSTRY IN MICHIGAN. 1966. AGDEX 900/03. Maynard Christensen and Raymond M. Clark. Source: Educational Publications Services, 201 Erickson Hall, Michigan State University, East Lansing, Michigan 48823. This second report of a series dealing with competencies needed for employment in non-farm agricultural business and industry in Michigan identifies nine major "industry functions" in the agricultural-chemical industry and the competencies needed to perform them. It suggests that the knowledge, skills, and abilities underlying the competencies form a

valid basis for developing related curricula and training programs. Price: \$1.00. Available in limited quantity. ERIC; See ARM Fall 1969.

164. APPLYING FOR A JOB. Slidefilm 390. 1971. AGDEX 900/05. J. H. Herbst. Source: Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801. This 54-frame slidefilm, in color, illustrates the following aspects of applying for a job: Deciding on the Kind of Job; Taking a Personal Inventory; Getting Additional Training; Finding Out What Jobs are Available; Writing a Letter of Application; and Interviewing with a Prospective Employer. Price: \$3.25 postpaid when payment accompanies order. Available in quantity.

165. BUSINESS LEADERSHIP IN THE AGRICULTURAL INDUSTRY. 1970. AGDEX 900/20. J. H. Dawson and S. Curtis Doran. Source: 101 Agriculture Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802. For high school seniors studying seven instructional areas in agriculture with special reference in agricultural business. Price: \$3.00. Available in limited quantity. ERIC; See AIM Spring 1971.

166. AGRIBUSINESS SALESMANSHIP FOR FFA MEMBERS. 1969. AGDEX 900/30. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education, Field Office, Petrie Hall, Auburn, Alabama 36890. A reference unit for teachers and students to use in studying salesmanship. Units of instruction include A Career in Agricultural Selling, Becoming a Salesman, Developing the Right Sales Personality, Types of Customers, How to Meet the Customer, Presenting the Merchandise, Overcoming Objections, Closing the Sale, Suggestion Selling. (22 pages). Price: \$ .30. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

167. PERSONAL DEVELOPMENT FOR SUCCESSFUL EMPLOYMENT. 1969. AGDEX 900/60. A. H. Halcomb and others of V. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A booklet to assist in training students in personal development. Contains units on Developing Desirable Social Graces, Improving Personal Appearance, Respect for Law and Authority, Seeking Employment--How to Land a Job, Personality Rating Scale. (30 pages). Price: \$ .35. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

168. INTRODUCTION TO AGRI-BUSINESS MANAGEMENT. 1969. AGDEX 920/20. Larry Selland. Source: North Dakota Vocational Agriculture Association, Room 100, Morrill Hall, North Dakota State University, Fargo, North Dakota 58102. Resource unit for use in teaching general Agri-business unit in high school class of Vocational Agriculture. Price: \$4.50. Available in limited quantity.

169. MOVING PRODUCTS INTO AGRICULTURAL FIRMS. 1970. AGDEX 920. David L. Williams and Ali M. Ammadi. Source: Agricultural Education Division, University of Illinois, Urbana, Illinois 61801. This publication includes seven teaching source units that focus upon the knowledges and skills needed by employees in moving the product from the supplier to the agricultural firm. Each unit is divided into problem areas with anticipated problems and concerns of students, suggested activities and references. Price: \$ .75. Available in limited quantity.

170. HANDLING PRODUCTS AND PERSONNEL IN AGRICULTURAL FIRMS. 1970. AGDEX 920. David L. Williams. Source: Agricultural Education Division, University of Illinois, Urbana, Illinois 61801. This publication includes teaching materials for agricultural occupations other than farming. Instructional units were developed for

teachers to use in teaching the knowledges and skills related to handling products and personnel in nonfarm agricultural businesses. Price: \$ .50. Available in limited quantity.

171. AGRIBUSINESS WOODWORKING (Student Study Guide). 1970. AGDEX 930. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of agribusiness woodworking. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

172. GENERAL AGRICULTURAL MECHANICS (Student Study Guide). 1970. AGDEX 930. Vocational Agriculture Supervision Staff. Source: Supervision Vocational Agriculture, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of general agricultural mechanics. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

173. AGRIBUSINESS METALWORKING (Student Study Guide). 1970. AGDEX 930. Vocational Agriculture Supervision Staff. Source: Supervision Vocational Agriculture, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of metalworking in agribusiness. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

174. AGRIBUSINESS POWER MECHANICS (Student Study Guide). 1970. AGDEX 931. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of agribusiness power mechanics. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

175. AGRIBUSINESS ELECTRICITY (Student Study Guide). 1970. AGDEX 933. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of agribusiness electricity. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

176. AGRIBUSINESS MASONRY (Student Study Guide). 1970. AGDEX 934. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of agribusiness masonry. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

177. AGRIBUSINESS CONSTRUCTION (Student Study Guide). 1970. AGDEX 934. Vocational Agriculture Supervision Staff. Source: Vocational Agriculture Supervision, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in the field of agribusiness construction. Price: \$1.00. Available only to Head Teacher Educators and State Supervisors. Available in limited quantity.

178. COTTON GIN EMPLOYEE, COURSE OF STUDY FOR COOPERATIVE PART-TIME TRAINING, No. 32. 1969. AGDEX 940. Lester Buford, Frank Brownfield, and Wayne Forrest. Source: Vocational Instructional Services, Texas A & M University, College Station, Texas 77843. Course of study for individualized instruction based upon certain required references, but containing information sheets of subject matter. Price: \$5.75. Available in quantity.

179. PLANNING AND OPERATING A GARDEN CENTER. VAS 5012. 1970. AGDEX 951. R. L. Courson. Source: Vocational Agriculture Service, University of Illinois, 434 Rmford Hall, Urbana, Illinois 61801. This 24-page subject-matter unit discusses such

things as wholesalers, sales, supplies and services, selecting a location and facilities, marketing strategy, and records. Price: \$ .30 postpaid when payment accompanies order. Available in quantity. ERIC; See AIM Spring 1971.

180. THE GREENHOUSE WORKER. 1970. AGDEX 952. Alex Laurie and Norman Bloss. Source: Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. The book contains technical information, instructions as to how manipulative operations should be performed, and exercises to provide practical experience for the student. The book should be used by the student while placed for co-operative work experience with a greenhouse operator. Price: \$1.85. Available in quantity.

181. WATER POLLUTION. 1970. AGDEX 960. Steven LaMarine. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Sound filmstrip, in color, explaining sources of water pollution. Designed especially for agriculture students but can be used in non-ag classes. Kit consists of filmstrip, illustrated script, and taped narration. Narration available on either reel tape or cassette at same charge. Price: \$7.50. Available in quantity.

182. COURSE OF STUDY IN NATURAL RESOURCES. 1970. AGDEX 960/00. S. S. Richardson, State Staff Members, and a committee of teachers of vocational agriculture. Source: Mr. Elvin Downs, State Specialist, Agricultural Education, Department of Vocational Education, 136 East South Temple, Floor 13, Salt Lake City, Utah 84111. A course outline with instructional units and references for advanced students of vocational agriculture. Curricular level and behavioral objectives are suggested for eight instructional units in natural resources. References are cited for each unit. The outline includes the following: Scope and importance of natural resources in Utah, the region and nation; Job opportunities and job entry requirements; The need for and purpose of conservation; The range - its use and management; Forests - their use and management; Fish and wildlife as a natural resource; Outdoor recreation; Occupational work experience. Student Learning Activities, Learning Materials, and Teacher Management Activities. Under the above sub-headings are the specific references and the recommended evaluative procedures. This instructional unit is one of nine course outlines prepared for teachers of vocational agriculture. Price: No charge. Available in limited quantity.

#### AGDEX .10 - .60 PROFESSIONAL

183. AN ASSESSMENT OF ADMINISTRATIVE PROBLEMS IN TEACHER EDUCATION IN AGRICULTURE. 1969. AGDEX .10/20. Gene M. Love, et al. Source: Agricultural Education, 122 Waters Hall, Columbia, Missouri 65201. Reports the findings of the AATEA committee charged with investigating administrative problems in teacher education in agriculture. Price: No charge. Available in limited quantity. ERIC; See ARM Spring 1970.

184. PROGRAM PLANNING SUGGESTIONS FOR VOCATIONAL AGRICULTURE IN MISSOURI, Ag. Ed. Series, Vol. 3, No. 5. 1970. AGDEX .10/30. Bob R. Stewart. Source: Agricultural Education, 122 Waters Hall, Columbia, Missouri 65201. Provides a description and listing of possible job titles for the various areas of instruction in vocational agriculture as well as a table detailing the relationship between course titles and areas. Price: No charge. Available in limited quantity.

185. ARC WELDING ARRANGEMENT AND EXHAUST SYSTEM FOR VOCATIONAL AGRICULTURAL SHOPS. AGDEX .10/40. John Mundt, Graduate Student. Source:

Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. Price: \$.25. Available in limited quantity.

186. STANDARDS AND PLANS FOR VOCATIONAL AGRICULTURE BUILDINGS AND FACILITIES IN ALABAMA. 1969. AGDEX .10/40. A. H. Halcomb and others of Vo. Ag. Supervisory Staff. Source: Agricultural Education Service - Field Office, Petrie Hall, Auburn, Alabama 36890. A guide to superintendents, architects, principals, supervisors, and teachers in providing suitable facilities, tools, and equipment for effective instruction in vocational agriculture. (61 pages). Price: \$ .75. Copies available only to state supervisors and head teacher-trainers as long as supply lasts.

187. ABSTRACTS OF RESEARCH IN AGRICULTURAL EDUCATION IN PENNSYLVANIA, 1970, Vol. II, No. 2, Teacher Education Research Series. 1970. AGDEX .20. G. Z. Stevens. Source: Agricultural Education, The Pennsylvania State University, University Park, Pennsylvania 16802. Available in limited quantity.

188. 1970-71 DIRECTORY OF POST-SECONDARY EDUCATION IN AGRICULTURAL AND NATURAL RESOURCE OCCUPATIONS. 1970. AGDEX .20/10. Maynard J. Iverson. Source: Department of Agricultural Education, The Ohio State University, Columbus, Ohio 43210. A current directory listing all states and possessions of the U. S.; the respective state contact personnel and their addresses; the names and addresses of all institutions offering post-secondary, less-than-baccalaureate agriculture or natural resource programs; local Ag. Dept. chairman or chief instructor for each institution; and Ag programs or areas offered. Price: Not yet established. Available in limited quantity.

189. 9th GRADE CURRICULUM. 1970. AGDEX .20/50. Sixteen Oregon Agriculture Teachers. Source: Agricultural Education Department, Oregon State University, Corvallis, Oregon 97330. Lists behavioral objectives, learning activities which sixteen Oregon agriculture teachers felt should be included in all Oregon vocational agriculture instruction at the 9th grade (or first vocational agriculture course). Price: Single copies free. Available in limited quantity.

190. SUGGESTED BASIC CORE FOR VOCATIONAL AGRICULTURE. 1970. AGDEX .20/50. Oregon Agriculture Teachers. Source: Oregon Board of Education, Division of Community Colleges and Continuing Education, Agriculture Education, Salem, Oregon 97310. An attempt by Oregon Vocational Agriculture Teachers to identify a common core of content basic to all agricultural occupations. Content is intended to be included in the first two years of the agriculture cluster curriculum. Price: No charge. Available in limited quantity.

191. DEVELOPMENT OF HUMAN RESOURCES THROUGH A VOCATIONALLY ORIENTED EDUCATIONAL PROGRAM FOR DISADVANTAGED FAMILIES IN DEPRESSED RURAL AREAS. Subtitle: A Family Centered Vocationally Oriented Education Program for the Rural Disadvantaged. USOE Project No. 5-0125, Interim Report No. 7. 1970. AGDEX .20/50. Lloyd J. Phipps, David L. Williams and Hollie B. Thomas. Source: Agricultural Education Division, University of Illinois, Urbana, Illinois 16801. Contains three source units on initiating educational programs for the rural disadvantaged and twelve teaching units that focus upon problems of the rural disadvantaged; (1) determining realistic career choices and plans for the children, (2) improving family financial management, and (3) improving family income.

192. INSTRUCTIONAL MATERIALS FOR V. 1. II PRODUCTION AGRICULTURE (Lesson Plans and Transparency Masters). 1970. AGDEX .20/51. Center Staff and Vocational Agriculture Teachers. Source: Vocational Instructional Services, Texas A &

M University, College Station, Texas 77843. Contains technical subject matter and 218 transparency masters for the second year course in Production Agriculture. (450 pages). Price: \$18.50. Available in quantity.

193. AN EVALUATION CHECK FORM FOR VOCATIONAL AGRICULTURAL DEPARTMENTS IN IDAHO. AGDEX .30. D. L. Kindschy. Source: Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. An evaluation form designed to be used by a local teacher, local advisory council or school administration. Covers the areas of organization, instruction, FFA, summer programs, and permanent facilities. Price: \$ .25. Available in limited quantity.

194. METHODS OF TEACHING SPECIAL NEEDS STUDENTS IN VOCATIONAL AGRICULTURE. 1970. AGDEX .30/30. Florida A & M University and Florida State Department of Education. Source: Agricultural Education Workshop, Florida A & M University, Tallahassee, Florida 32304. A mimeographed booklet (37 pages) developed by teachers and consultants at a workshop on Methods of Teaching Special Needs Students in Vocational Agriculture. Price: No charge. Available in limited quantity.

195. RESOURCE UNIT ON SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS FOR CORE CURRICULUM. 1970. AGDEX .40. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

196. CROP AND LIVESTOCK GOALS FOR AGRICULTURAL PRODUCTION, Vol. II, No. 3s. 1970. AGDEX .40/21. S. M. Curtis. Source: Agricultural Education Department, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: \$ .50. Available in quantity.

197. RESOURCE UNIT ON FUTURE FARMERS OF AMERICA ORGANIZATION. 1970. AGDEX .50. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

198. RESOURCE UNIT ON PERSONAL GROWTH AND DEVELOPMENT THROUGH THE FFA FOR CORE CURRICULUM. 1970. AGDEX .50. Source: Department of Agricultural Education, University of Arizona, Tucson, Arizona 85721. The title is self-explanatory. Available in limited quantity. ERIC; See AIM Spring 1971.

199. INDIVIDUALIZED INSTRUCTIONAL PROBLEMS FOR TEACHING FFA WORK. 1970. AGDEX .50/10. Hilding W. Gadda. Source: Agricultural Education, South Dakota State University, Brookings, South Dakota 57006. A compilation of objectives, introductions, procedural learning activities, references and tests on the 14 problem areas on FFA which are contained in the Advisor's Teaching Guide on FFA, by Selland and Torrance. Price: Single copy free. Available in limited quantity. ERIC; See AIM Spring 1971.

200. TRANSPARENCIES FOR LEADERSHIP I. 1970. AGDEX .50/10. Bob R. Stewart and Venton Haskins. Source: Instructional Materials Laboratory, Room 8 Industrial Education, University of Missouri, Columbia, Missouri 65201. A set of 40 transparencies and copies of the masters for Leadership I. Price: \$12.00 (includes handling and postage). Available in limited quantity.

201. SOURCE UNIT IN PARLIAMENTARY PROCEDURE. 1970. AGDEX .50/51. Jay A. McCracken. Source: Dr. I. C. Cross, Vocational Education Department, Colorado State University, Ft. Collins, Colorado 80521. This source unit was prepared as a guide for

Vo-Ag teachers to help them analyze this area and organize lesson units for instruction. Price: \$1.00. Limit one copy per order. Available in limited quantity.

202. GRADUATE STUDENT INFORMATION BULLETIN FOR AGRICULTURAL EDUCATION MAJORS. AGDEX .60. D. L. Kindschy. Source: Collegiate Chapter of FFA, Department of Agricultural Education, University of Idaho, Moscow, Idaho 83843. This bulletin is designed to help graduate students progress towards their advanced degree and could be used as an example for a similar bulletin for any individual department. Price: \$ .25. Available in limited quantity.

203. TRUSTEES FOR TOMORROW. 1970. AGDEX .60/10. Clyde Hostetter. Source: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401. Set consists of 153 color slides with accompanying taped narration and script which tells the story of the California Young Farmers Association and depicts typical Young Farmer members and their wives. Good for stimulating Young Farmer activities in other states. (Length: 28 minutes). Price: \$35.00. Available in quantity.