DOCUMENT RESUME

ED 203 174 CE 029 341

AUTHOR Hemp, Paul E.; Ethridge, Jim
TITLE Urban Agriculture Program Planning Guide.
INSTITUTION Illinois Univ., Urbana. Dept. of Vocational and Technical Education.
SPONS AGENCY Illinois State Board of Education, Springfield. Dept. of Adult, Vocational and Technical Education.
PUB DATE 81
CONTRACT R-33-21-D-0542-388
NOTE 34p.; For related documents see CE 029 340 and ED 189 383.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Agricultural Education; Agricultural Occupations; Curriculum Development; Curriculum Guides; High Schools; Models; *Off Farm Agricultural Occupations; *Program Development; Resources; *Urban Areas; Urban Population; Urban Schools; *Vocational Education
IDENTIFIERS Illinois Core Curriculum Project

ABSTRACT

Urban agriculture may be defined as those areas of agriculture that are practiced in metropolitan settings, plus knowledge and skills in agricultural subject areas which lead to vocational proficiency and improved quality of life or effective citizenship. Agriculture areas that are especially significant in urban settings include ornamental horticulture, companion animals, food processing, conservation and ecology, agricultural marketing, and gardening. This planning guide has been designed as an aid to teachers and administrators who wish to plan or replan an urban agriculture program at the secondary school level. A suggested procedure and sample forms are included to assist the teacher in developing courses of study using the Illinois Core Curriculum Project materials. The guide includes an introduction to urban agriculture, which explains the functions of agricultural education in urban areas, federal legislative provisions, and the Illinois Core Curriculum for agricultural education; instructions for planning an urban program, including program objectives; five program models; course planning aids, such as course planning sheets and instructions for their use; and a list of resources for program planning. (KC)

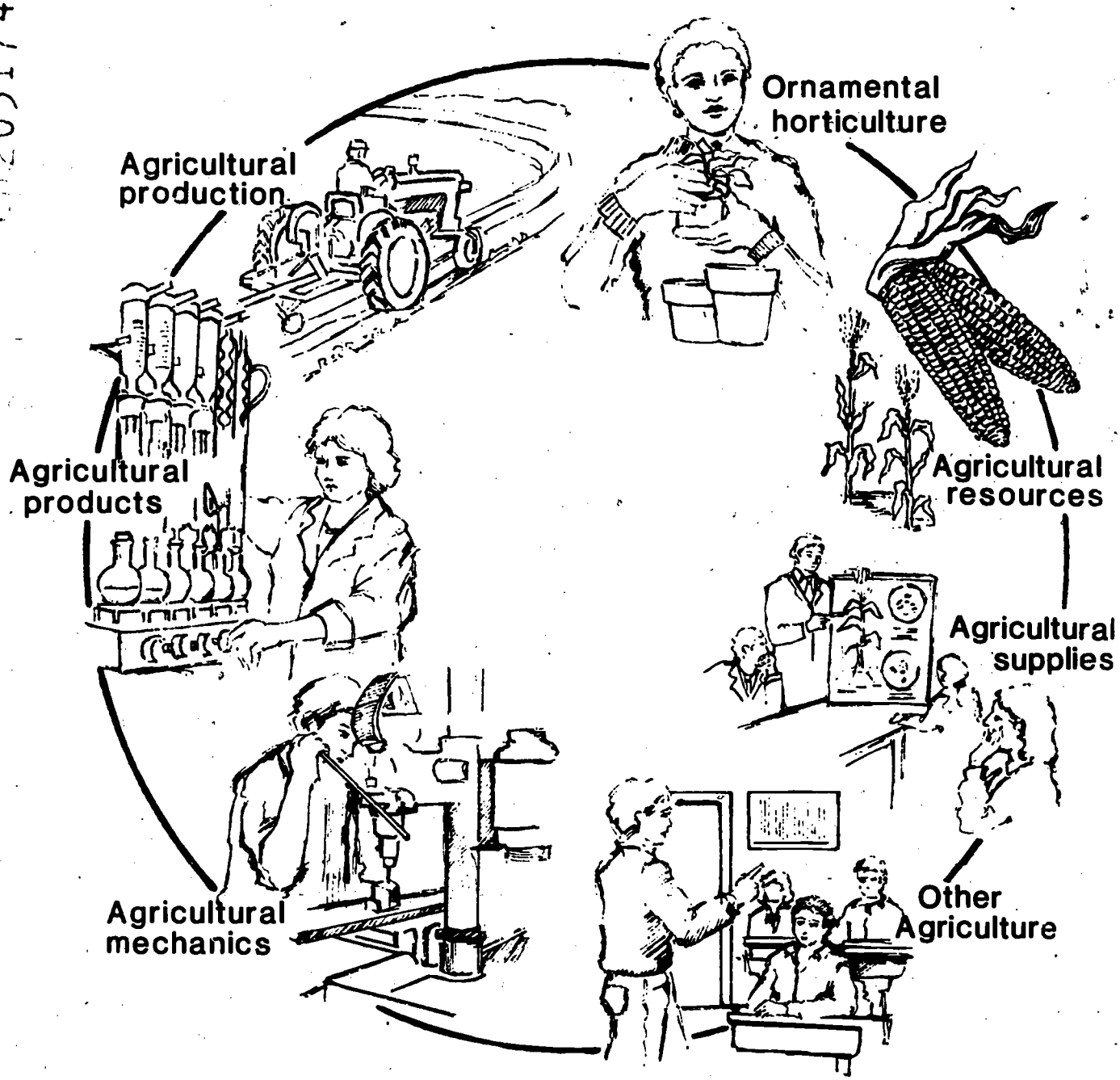
****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Urban Agriculture Program Planning Guide

Illinois State Board of Education

Adult Vocational and Technical Education

ED203174



CE 024391

U S DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C. Reisinger

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Urban Agriculture Program Planning Guide

Project Staff

Administrative:
Paul E. Hemp
Roger L. Courson

Developers:
Paul E. Hemp
Jim Ethridge

Department of:
Vocational and
Technical Education
College of Education
University of Illinois
at Urbana - Champaign

Sponsored by

Illinois
State Board of
Education

Donald F. Muirheid
Chairman

Donald G. Gill
State Superintendent
of Education

Department of
Adult,
Vocational and
Technical Education

Research and
Development Section

June, 1981

Illinois State Board of Education

Department of Adult, Vocational and Technical Education
Research and Development Section

Product Abstract

1. Title of material: Agricultural Occuaptions Program Planning Guide

2. Date material was completed: June, 1981

3. Please check one: New material X Revised material ____

4. Originating agency: Department of Vocational and Technical Education, University of Illinois
   Address: 1310 S. Sixth Street, Champaign, Illinois Zip Code: 61820

5. Name(s) of developer(s): Paul E. Hemp and Jim Ethridge
   Address: 357 Education Building, Champaign, Illinois Zip Code: 61820

6. Developed pursuant to Contract Number: R-33-21-D-0542-388

7. Subject Matter (Check only one according to USOE Code):

   USOE Code

   - X 01 Agricultural Education
   - ____ 03 Business and Office Education
   - ____ 04 Distributive Education
   - ____ 07 Health Occupations Education
   - ____ 09 Home Economics Education
   - ____ 10 Industrial Art Education
   - ____ 16 Technical Education
   - ____ 17 Trade and Industrial Education
   - ____ 22 Cooperative Education
   - ____ Career Education
   - ____ Other (Specify) ____

8. Education Level:

   - ____ Pre-K Thru 6
   - ____ 7-8
   - X 9-10
   - X 11-12
   - ____ Post-Secondary
   - ____ Adult
   - ____ Teacher (Pre-service)
   - ____ Administrator (Pre-Service)
   - ____ Other (Specify) ____

9. Intended for Use By:

   - ____ Student
   - X Classroom Teacher
   - X Local Administrator
   - X Teacher Educator
   - ____ Guidance Staff
   - ____ State Personnel
   - ____ Other (Specify) ____

10. Student Type:

    - X Regular
    - ____ Disadvantaged
    - ____ Handicapped
    - ____ Limited English Proficiency
    - ____ Other (Specify) ____

11. Medium and Format of Materials:

HARDCOPY	VIDEOTAPE	FILM	MICROFICHE
No. of pages 28	____ Minutes	____ Minutes	____ B & W
X Paper bound	____ B & W	____ B & W	____ Color
____ Hard bond	____ Color	____ Color	
____ Loose-leaf	____ inches	____ mm	
Photos: Yes ____	No X		
Diagrams: Yes X	No ____		

___ SLIDES
No. of frames _____
___ B & W
___ Color
___ Audio
___ Carousel provided
___ Other packaging used
(Specify) _____

___ FILM STRIPS
No. of frames _____
___ B & W
___ Color
___ Audio

___ AUDIO
___ Automatic synch
___ _____ Hz
___ Manual cue
___ Reel
___ Cassette
___ Cartridge

___ OTHER
Specify:
_____
_____
_____

12. Availability:

_____ One copy free
_____ In ERIC system (No. _____)
For sale @ $ _____ per copy
X Not available
_____ Loan copy available

Contact: Name _____ Phone ( )_____
Address _____ Zip Code _____

13. Copyright Restrictions:

Contact: Name _____ Phone ( )_____
Address _____ Zip Code _____

14. Is Training Required for Optimum Use of These Materials? Yes X No____

15. Are Consultive/Training Services Available? Yes X No____

Contact: Illinois State Board of Education
Department of Adult, Vocational and Technical Education
Research and Development Section, E-426
100 North First Street
Springfield, IL 62777
(217) 782-4620

16. General Description (State the general objective and suggested method of use. Summarize the content and tell how it is organized. Continue on back of this sheet or on another sheet, if necessary.):

This planning guide has been designed as an aid to teachers and administrators who wish to plan or replan an agricultural occupations program at the secondary school level. A suggested procedure and sample forms are included to assist the teacher in developing courses of study using the Illinois Core Curriculum Project materials.

17. Person Completing this Abstract: Pau[illegible] 'emp

Full Address:

357 Education Building
1310 S. Sixth Street
Champaign, Illinois Zip 61820

A GUIDE FOR PLANNING URBAN AGRICULTURE PROGRAMS IN SECONDARY SCHOOLS USING ILLINOIS CORE CURRICULUM MATERIALS

Urban agriculture may be defined as those areas of agriculture which are practiced in metropolitan areas plus knowledges and skills in agricultural subject areas which lead to vocational proficiency, improved quality of life or effective citizenship. Agriculture areas which are especially significant in urban settings include ornamental horticulture, companion animals, food processing, conservation and ecology, agricultural marketing and gardening.

The United States Department of Education has identified seven taxonomy areas in agriculture which are commonly used as a structure for curriculum development in vocational education. These taxonomy areas are as follows:

1. Agricultural production
2. Agricultural supplies and services
3. Agricultural mechanics
4. Agricultural products
5. Ornamental horticulture
6. Renewable natural resources
7. Forestry

Most, if not all, of these taxonomy areas are represented in urban business and industry and in the daily lives of urban people. Some of these areas such as ornamental horticulture, are centered primarily in urban and suburban centers where the markets for agricultural products are the greatest.

Agriculture, broadly defined, is important not just in the rural areas but also in the urban and suburban areas where extensive agribusiness employment opportunities are present. Urban revitalization efforts have created a growing concern for conservation and for better management of parks and open space as a means of combating urban blight.

In recent years, many studies have been conducted to identify agricultural occupations which might form the basis for vocational education programming in the secondary schools and beyond. Hundreds of these occupations have been identified and described in various taxonomy areas of agriculture. Some of the agricultural occupations which seem to be especially important in urban settings include the following:

- Nurseryworker
- Horse trainer
- Veterinary assistant
- Kennel manager
- Zoo keeper
- Animal beautician (groomer)
- Bird raiser
- Animal breeding technician
- Animal warden
- Florist
- Laboratory animal assistant
- Meat cutter
- Blacksmith
- Dairy product tester
- Produce manager
- Floral designer
- Plant propagator
- Landscape contractor
- Grounds caretaker
- Tree expert
- Greenskeeper
- Landscape gardener
- Park keeper
- Greenhouse worker
- Flower gardener
- Campground maintenance person
- Apiculturist
- Seed specialist
- Weed controller
- Small animal supplier
- Conservation aide

For additional information on agriculture employment opportunities in Illinois, the reader should refer to a recent survey[1] conducted by Carolyn Sands as a part of the Illinois Core Curriculum Project.

Occupations such as those listed above can be used as a basis for determining the content of an urban vocational education program in agriculture. If schools plan to offer vocational education to prepare students for employment in these areas, local surveys need to be conducted to determine employment opportunities and to identify competencies which students need for entry-level employment.

Functions of Agricultural Education in Urban Areas

Agriculture instruction can serve several functions in metropolitan schools; however, the primary function emphasized in this curriculum guide is vocational education. Many urban students can find employment in agricultural occupations in either urban or rural areas. With the pool of farm-reared students growing smaller and smaller, stronger demands will be made on urban youth to prepare themselves for agricultural occupations. Urban schools need to prepare students for agricultural occupations which exist in urban areas in the same way that they prepare students for employment in other vocational areas. However, some students may develop an interest in agricultural careers which will lead them to employment in rural areas. The vocational function of agricultural education in urban schools should provide for those students who plan to enter the labor market upon leaving high school and those students who plan to continue their vocational education in agriculture at the postsecondary level.

---

[1] Sands, Carolyn, Burton Swanson and John H. Herbst. Employment Trends in Illinois Agriculture, Division of Agricultural Education, University of Illinois, Urbana, Illinois, 1980.

A second function of agricultural education in urban schools is to serve the practical arts and avocational needs of youth. The trend towards more leisure time and apartment living suggests a need to assist students in identifying and enjoying leisure activities related to agriculture. Growing plants, caring for turf and ornamental plants, managing companion animals and pets, gardening, fishing and hunting, studying nature and other agricultural activities could be taught in an urban agriculture program.

A third function of agricultural education in urban settings is citizenship education. If urban residents are to function as intelligent consumers of agricultural products and if they are to discharge their civic duties regarding agricultural policy, some involvement in an organized agriculture course or program seems imperative. Agricultural education can be taught as an important part of general education either through separate courses or integrated into general education courses.

A fourth function which might be served by offering agricultural education in urban schools is to use agriculture as a vehicle for teaching other subject areas or as a vehicle for serving students with special needs. Many teachers have found that basic educational areas such as mathematics, science and communications can be taught effectively in agriculture courses and that correlating instruction in agriculture and the basic education areas can result in increased motivation for learning. Throughout the United States, an increasing number of educators have been using agriculture as a therapy activity for people with mental health problems and for senior citizens who need "hands-on" activity to occupy their time. Thus, horticulture therapy has become an important function of agricultural education in hospitals and rehabilitation centers throughout the nation.

Federal Legislative Provisions

Traditional programs of vocational agriculture have been offered in rural schools in Illinois in the past under the Smith-Hughes Act passed in 1917. The Smith-Hughes Act provided reimbursement for programs that addressed the following purposes:

1. that "such education shall be to fit for useful employment,
2. that such education shall be less than college grade,
3. that such education be designed to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home."[2]

Clearly, the thrust of this Act was to promote the vocational aspects of agricultural education in the secondary schools and to prepare students for farming. Nothing in this Act suggested that urban agricultural education should be considered or encouraged.

In 1963, new federal legislation changed the definition and scope of vocational education in agriculture and broadened the objectives of vocational agriculture programs. The Vocational Education Act of 1963 included the following passage:

> "Any amounts allotted (or apportioned) under such titles, Act or Acts for agriculture may be used for vocational education in any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work of the farm or of the farm home, and such education may be provided without directed or supervised practice on a farm."[3]

---

[2]Smith-Hughes Act.

[3]Vocational Education Act of 1963.

With the passage of the Vocational Education Act of 1963, the possibilities for offering vocational agriculture for off-farm agricultural occupations in urban areas greatly increased. During the past 15 years, some urban and suburban schools have moved to add ornamental horticulture to their curricula and it appears that this development of urban agriculture will continue to grow. In order to assist in the development of vocational education programs in agriculture in urban areas, the Division of Agricultural Education at the University of Illinois embarked on a Core Curriculum in Agriculture project in 1980 to develop a Core Curriculum in agriculture for metropolitan schools and to provide assistance to schools where vocational agriculture programs were to be conducted. This project was supported and funded by the Department of Adult, Vocational and Technical Education, Illinois State Board of Education.

The Illinois Core Curriculum

Urban agriculture programs need to be structured to meet the needs of urban students and to respond to the problems of the city dweller and urban industry. The traditional vocational agriculture program offered in rural schools does not fit the urban scene. Even though certain areas of agriculture content should be studied by both rural and urban students, a large part of the urban curriculum should reflect the special needs and concerns of urban people.

Many of the agriculture programs offered by schools in the Chicago area focus heavily on ornamental horticulture. The Illinois Core Curriculum Project has been designed to encourage the development of a broader curriculum in urban schools. The urban core includes taxonomy areas other than horticulture; however, horticulture constitutes a major area of study. Core curriculum materials have been or will be developed for a

four-year sequence at the secondary school level. The core materials will include 25-30 teaching packets for each of the four years of instruction. Each teaching packet includes a teacher's guide (source unit), study materials for students, transparency masters where appropriate, sample test questions, demonstrations, student worksheets and information guidelines. These materials have been field tested by five teachers in urban schools and revised according to feedback received from teachers and students. The time schedule for the final production of teaching packets is as follows:

Core I	1981
Core II	1982
Core III & IV	1983

The units and problem areas included in Core I are as follows:

UNIT A: Orientation to Agricultural Occupations

PROBLEM AREAS:

1. Introduction to the school program
2. Introduction to agriculture and society
3. Identifying careers in agriculture

UNIT B: Supervised Occupational Experience

PROBLEM AREAS:

1. Orientation to my SOE program
2. Planning my SOE program
3. Keeping records on a SOE program

UNIT C: Leadership in Horticulture/Agriculture

PROBLEM AREAS:

1. Understanding the National Junior Horticulture Association and FFA as a part of Vocational Horticulture/Agriculture
2. Duties and responsibilities of youth club officers and members
3. Developing basic parliamentary skills

UNIT D: Horticulture/Agricultural Mechanics

PROBLEM AREAS:

1. Understanding and practicing safety in horticulture/agriculture
2. Identifying, fitting and using hand tools
3. Using and maintaining selected power tools
4. Developing basic carpentry skills

UNIT E: Plant Propagation

PROBLEM AREAS:

1. Care, handling and storing herbaceous seeds
2. Seeding in containers
3. Propagating by cuttings
4. Propagating by layerage
5. Propagating by division or separation

UNIT F: Plant Identification and Classification

PROBLEM AREAS:

1. Identifying and classifying plants
2. Identifying different parts and types of leaves
3. Identifying different parts and types of stems
4. Identifying different parts and types of fruits
5. Identifying different parts and types of flowers
6. Identifying different parts and types of roots

UNIT G: Growing and Managing Horticultural Crops

PROBLEM AREAS:

1. Watering plants
2. Pruning, pinching and disbudding plants
3. Planting plants
4. Identifying and using structures used in the production of plants
5. Understanding and controlling temperature around plants
6. Understanding and controlling light around plants
7. Growing vegetables

UNIT H: Identifying and Controlling Pests of Horticultural Plants

PROBLEM AREA:

1. Pest identification and safe use of pesticides

UNIT I: Urban Animals

PROBLEM AREAS:

1. Care and feeding of the family dog
2. Care and feeding of the family cat
3. Care and feeding of the family horse

UNIT J: Soil Science and Conservation of Natural Resources

PROBLEM AREAS:

1. Pasteurizing and preparing a growing media for the greenhouse
2. Collecting soil samples from the greenhouse, garden and lawn and applying sample test results
3. Identifying soil amendments and their functions

The units and problem areas tentatively planned for Core II are as follows:

UNIT A: Orientation to Agricultural Occupations

PROBLEM AREAS:

1. Orientation to vocational agriculture course and SOEP
2. Developing effective study habits

UNIT B: Supervised Occupational Experience

PROBLEM AREAS:

1. Summarizing and analyzing records
2. Estimating income and expenses for S.O.E. projects

UNIT C: Leadership in Horticulture/Agriculture

PROBLEM AREAS:

1. Participating in individual and group activities in youth organizations
2. Developing leadership skills
3. Developing basic public speaking skills

UNIT D: Horticulture/Agricultural Mechanics

PROBLEM AREAS:

1. Assembling tools and equipment
2. Servicing electrical wiring and electrical motors
3. Servicing small gas engines
4. Glazing

UNIT E: Plant Propagation

PROBLEM AREAS:

1. Propagating plants by budding and grafting

UNIT F: Plant Identification

PROBLEM AREAS:

1. Identifying and using turf grasses and weeds in the landscape
2. Identifying and using trees and shrubs in the landscape
3. Identifying and using vines and ground covers in the landscape
4. Identifying and using annual and perennial flowers in the landscape
5. Identifying and using flowering and foliage house plants

UNIT G: Growing and Managing Horticultural Crops

PROBLEM AREAS:

1. Growing bedding plants
2. Growing greenhouse flowering crops
3. Growing container nursery crops
4. Forcing bulb crops

UNIT H: Identifying and Controlling Pests of Horticultural Plants

PROBLEM AREAS:

1. Identifying and controlling flower and garden pests
2. Identifying and controlling turf pests
3. Identifying and controlling tree and shrub pests

UNIT I: Urban Animals

PROBLEM AREAS:

1. Identifying, feeding, caring and restraining laboratory animals
2. Identifying, feeding, caring and restraining other companion animals

UNIT J: Soil Science and Conservation of Natural Resources

PROBLEM AREA:

1. Fertilizing horticultural crops

UNIT K: Agricultural Products

PROBLEM AREAS:

1. Identifying and selecting wholesale and retail cuts of meat
2. Identifying and selecting cuts of poultry and eggs
3. Identifying and selecting fresh fruits and vegetables
4. Identifying and selecting ornamental horticultural products
5. Identifying and selecting milk and cheese

UNIT L: Landscape Design Establishment and Maintenance

PROBLEM AREAS:

1. Designing and drawing a landscape plan
2. Establishing and maintaining a turf area
3. Constructing landscape structures

Units and problem areas to be included in Core III and IV will be determined in 1981-82 by the project staff and the Metropolitan Advisory Committee.

Planning an Urban Program

A vocational program in urban agriculture should be planned as a four-year sequence. In keeping with the guidelines for vocational education program planning, courses offered for ninth- and tenth-grade students should be designed and taught as occupational orientation. Courses taught at the eleventh- and twelfth-grade level should be designed and taught as occupational training (skill development). Cooperative vocational education should be available to all juniors and/or seniors who plan to enter the

labor market directly from high school and to other students who need and want on-the-job training experience.

In planning an urban program the following general program objectives should be considered:

1. To develop agricultural competencies needed by individuals engaged in or preparing to engage in production agriculture.

2. To develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations other than production agriculture.

3. To develop an understanding of and appreciation for career opportunities in agriculture and the preparation needed to enter and progress in agricultural occupations.

4. To develop the ability to secure satisfactory placement and to advance in an agricultural occupation through a program of continuing education.

5. To develop these abilities in human relations which are essential in agricultural occupations.

6. To develop the abilities needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities.

Suggested procedures for administrators and teachers to follow in developing an urban agriculture program are as follows:

1. Citizens' advisory councils should be utilized to help determine educational needs, to clarify purposes for the program, and to suggest appropriate areas of instruction.

2. The program to be offered, the couse pattern and course titles and the content of these courses should be determined by an analysis of the agricultural industry of the area and an identification of the agricultural knowledges and skills needed by employees and those students who are to be served.

3. Information concerning the school situation (enrollments, facilities and equipment, available staff, course offerings and monetary constraints) should be obtained before programs and courses are planned.

4. Program planning data should be obtained from community surveys, census reports, state and national manpower studies and informal contacts with agriculture leaders.

5. The vocational program should include a sequence of courses which lead to entry-level employment or to further education.

6. Agricultural occupations courses in high schools should be articulated with instructional programs in elementary schools, area vocational centers, and postsecondary institutions.

7. Instructional programs should be designed to serve students with special needs including the handicapped, disadvantaged, college-bound and minority students.

8. A master list of units and problem areas to be taught during the four years of instruction together with suggested time allocations should be developed.

9. Problem areas should be assigned to the course or the year of instruction on the basis of the following criteria:

   A. Difficulty of material

   B. Opportunity for application by student

   C. Readiness of student to learn

   D. Necessity for prerequisite learning.

10. Problem areas which are seasonal in nature (planting a garden, growing bedding plants) or are related to a scheduled event (FFA public speaking contest) should be scheduled before scheduling problem areas which can be effectively taught any month of the year.

11. Agricultural mechanics and horticulture instruction should be scheduled so that the shop and greenhouse are utilized throughout the school year.

12. An appropriate course title, a course description and student performance objectives should be prepared for each course.

Program Models

No one program model will serve all schools. A model which fits in with other vocational programs offered by the school should be developed and implemented. In developing a program structure for urban agriculture, the following suggestions should be considered:

1. The high school program of agricultural occupations might well be multi-purpose, preparing some students for placement in an agricultural occupation or in further education, but also, providing career awareness and orientation, vocational exploration, general education in agriculture, leadership training, and citizenship development.

2. Vocational education programs supported by vocational education funds should be designed to prepare persons enrolled in public schools for employment or for additional training at the post-secondary level.

3. Vocational education programs at the secondary level should be articulated with programs offered at the postsecondary level and career awareness programs at the K-8 level.

4. Vocational education programs should be comprised of an organized and articulated sequence of courses.

5. Occupational preparation for the non-farm agricultural occupations should be offered through the mechanism of a cooperative education placement for work experience program scheduled in the senior year after the student has taken two or more basic agriculture courses.

To assist administrators and teachers in the development of an urban agriculture program, five sample models are presented here as possible programs:

Model I. A Metropolitan Horticulture/Agriculture Vocational Program in a Three- or Four-year Comprehensive or Vocational High School.

Grade	Course
9*	General Vocational Orientation and Career Exploration
10	Basic Plant and/or Animal Science
11	Advanced Plant and/or Animal Science
12	Cooperative Vocational Education

*In a three-year high school the Vocational Orientation course may be offered in the junior high school.

Model II. A Metropolitan Horticulture/Agriculture Vocational Program Involving the Home High School and a Magnet School.

Grade	Course**
9	General Vocational Orientation and Career Exploration
10	Basic Horticulture/Agriculture
11	Advanced Horticulture/Agriculture
12	Cooperative Vocational Education

**Courses for grades 9 and 12 could be taken at the home high school, and courses for grades 10 and 11 could be taken at the magnet school.

Model III. A Metropolitan Horticulture/Agriculture Vocational Program Involving the Home High School and an Area Vocational Center.

Grade	Course
9 at Home High School	Introduction to Urban Agriculture
10 at Home High School	Basic Plant and/or Animal Science and Practice
11 at Area Vocational Center	Advanced Ag. Science & Practice
12 at Area Vocational Center	Cooperative Vocational Education

Model IV. A Two-year Metropolitan Horticulture/Agriculture Vocational Program in an Area Vocational Center for Students with no Prior Preparation in Vocational Agriculture.

Grade	Course
11	Vocational Plant and Animal Science
12	Advanced Plant and Animal Science with Placement Employment (Coop)

Model V A Metropolitan Horticulture/Agriculture Vocational Program in a Suburban High School with no access to an Area Vocational Center.

Grade	Course
9	Basic Plant and Animal Science
10	Basic Horticulture/Agriculture
11	Advanced Horticulture/Agriculture
12	Cooperative Vocational Education

Course Planning Aids

After a general program structure including a sequence of courses and program objectives has been developed, the teacher should prepare appropriate course titles and descriptions and determine the content of each course.

In developing course content, the teacher should refer to the units and problem areas included in the Illinois Core Curriculum in Agriculture and decide which areas should be included in course outlines. As indicated previously, the core curriculum material should not be adopted in its entirety but may comprise approximately 60 percent of the course content. The remaining 40 percent could be composed of units of instruction which are appropriate for the local community or to the students enrolled. This suggestion cannot be overemphasized. The core curriculum should be localized and supplemented to meet the educational needs of students who will be enrolling in the agricultural occupations program.

Some course planning forms have been included in this publication to assist the teacher in planning the local program of instruction. Suggestions for using these forms are included here to assist the teacher in the development of functional course outlines and plans.

FORM I

The Form I planning sheet may be used to list the course number and title for each grade level. Also, space has been provided to write a short description for each course. The following example illustrates the information which might be included on Form I:

Grade	Course Number	Course Title
9	101	Introduction to Urban Agriculture

FORM I

COURSE PLANNING SHEET

School _____ Teacher _____

Courses Offered in the 19__-19__ School Year

Grades	Course Number	Course Title and Description

FORM II

COURSE PLANNING SHEET

School _____ Instructor _____

Course titles:

1 _____ 4 _____

2 _____ 5 _____

3 _____ 6 _____

Allocation of Course Content by Courses

Units or Other Areas of Agriculture	Courses 1 2 3 4 5 6 (Number of days)

FORM IIA

COURSE PLANNING SHEET

School _____ Instructor _____

Allocation of Course Content by Courses

Units or Other Areas of Agriculture	Courses 1	2	3	4	5	6
	(Number of days)					

FORM III

COURSE PLANNING SHEET

School _____ Instructor _____

Course Content: Allocation by Months

Units and Problem Areas	Fall			Winter			Spring	
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May

FORM IV

COURSE PLANNING SHEET

School _____ Instructor _____

Course _____

Course Content--Allocation of Time to Problem Area.
Identification of Key Knowledges and Skills.

Units, Problem Areas (Coded or Abbreviated) Days
Key Knowledges (What does the student need to know?)
Key Skills (What does the student need to do?)

Month ( )

The course description for Introduction to Urban Agriculture might be written as follows:

> Introduction to Urban Agriculture is an exploratory agribusiness course offered to ninth-grade students. Occupational information accompanies the two major science units and the mechanics and construction unit to help the student become occupationally oriented so that occupational and educational planning can be started. Human relations and leadership development skills are implemented through participation in FFA activities and/or National Junior Horticulture Association activities.

FORM II AND IIA

Form II is designed to serve as a planning sheet for allocating the number of instructional days for each unit and for each course. On this form the teacher should enter the number of days (periods) to be devoted to each major unit of study such as Plant Identification and Classification. The course titles for all courses should be written in the blanks at the top of Form II. Form IIA is the same as Form II except no blanks have been provided for course titles. Form IIA is to be used as the second and subsequent planning sheets for this phase of the course planning process. The following example illustrates the information which might be included on Form II and IIA.

	Courses					
	1	2	3	4	5	6
Units	(Number of days)					
Plant Identification and Classification	35	30	10	8	0	5

FORM III

The Form III planning sheet is designed to record the month during which the instructional days for each unit and problem area will be scheduled. This sheet helps the teacher schedule instructional areas during the appropriate season or month of the year. It also helps the teacher to make efficient use of school greenhouse and to arrange out-of-class activities during months when the weather is likely to be conducive to field work. The following example illustrates the use of Form III:

Units and Problem Areas	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Plant Propagation:								
1. Care, handling and storing herbaceous seeds	2							
2. Seeding in containers		3					3	2
3. Propagating by cuttings			4					
4. Propagating by layerage	3							
5. Propagating by division								4

Form IV

The last step in using the four planning sheets is to re-write the units and problem areas for each course and to designate the estimated amount of time to be allocated to each area. Form IV can be used for this purpose and also as a place to record a breakdown of knowledges and skills to be included in each problem area. The following example without the knowledges and skills shows how Form IV can be used.

September	Days
Orientation to Agricultural Occupations:	
1. Introduction to the school program.	2
2. Introduction to agriculture and society	2
3. Identifying careers in agriculture.	3
Leadership in Horticulture/Agriculture:	
1. Understanding and participating in FFA or Junior Horticulture Club activities.	5
2. Duties and responsibilities of youth club officers and members	3
3. Developing basic parliamentary skills	5

A course outline should be developed for each course and copies distributed to the administrator and to students enrolled in agriculture courses. Measurable student objectives should be written for each course and teaching plans should be prepared in advance for several problem areas.

Other Resources for Program Planning

Teachers and administrators who are planning or replanning urban agriculture programs may wish to refer to two resources for additional help.

Conserva, Inc. completed a research project funded by the U.S. Department of Education in 1980 which resulted in a Handbook for Implementing Improved Vocational Agriculture/Agribusiness Programs in Urban Areas. This handbook describes urban agriculture programs in Dallas, Los Angeles, Miami, Philadelphia and other cities and offers suggestions on how these programs might be designed and conducted. A limited number of these Handbooks have been distributed to each state and in Illinois,

copies were distributed to teachers who attended the Core Curriculum Project Workshops in 1981.

A second resource is a publication entitled, Standards for Quality Agricultural Occupations Programs as Validated by the Agricultural Occupations Teachers in the Secondary and Area Vocational Centers of Illinois. This resource was developed as part of a research project funded by the Department of Adult, Vocational and Technical Education, Illinois State Board of Education and conducted at Southern Illinois University.