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ABSTRACT

The guide begins with some observations on teaching disadvantaged students, a list of successful types of learning activities, and recommendations for planning and conducting an effective classroom situation. Also included are 13 general objectives of a program for the disadvantaged. The guide, intended as a source of ideas and directions in selecting instructional units, is organized according to enterprises (topics) which are divided into problem areas (subtopics) followed by an application section which suggests some specific activities for students. Instructional topics include: masonry, electricity, plumbing, woodworking, metal work, welding, painting, agricultural equipment maintenance/repair, farm structures, animal care, crops, soil and water management, forestry, conservation, recreational occupations, horticulture, and agribusiness. Some of the instructional areas are designed to be taught flexibly, using those problem areas which will meet student needs. Other areas include a unit division for which all the problem areas should be taught. Final sections deal briefly with occupations for the disadvantaged and with relating occupations to the curriculum guide. (MS)

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TEACHING THE DISADVANTAGED

A Curriculum Guide for Classes of Disadvantaged Students in Agricultural Education Programs

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Teaching the Disadvantaged

This guide was developed to assist teachers in conducting educational programs for the disadvantaged. In order to use this guide effectively, several observations should be made concerning the teaching of the disadvantaged.

One of the first problems a teacher may face is the selection of disadvantaged students who should enroll in the program. Students possessing one or more of the following characteristics would benefit the most by participating in a program designed specifically for the disadvantaged:

1. Students with a poor educational background;
2. Students who have failed one or more grades in school;
3. Students who lack a basic cultural background which would enable them to take advantage of educational programs available;
4. Students from families existing on a poverty level income;
5. Students who are classified as slow learners, but who are not mentally retarded; and
6. Students who have experienced continual failure with the present school program in meeting their needs.

Once disadvantaged students have been selected to participate in a program designed especially for them, the task of stimulating the students and developing desirable behaviors within the students becomes that of the classroom teacher. One of the most profound qualifications of a successful teacher of the disadvantaged is having the right attitude. The teacher's attitude must project an acceptance of the students, a caring for the

students, and the ability to work with the students in a positive manner. Teaching methods and instructional activities must reflect the teacher's creativity, flexibility, and personal dynamism to a high degree of professionalism.

Instruction in the classroom or laboratory must be student oriented, activity oriented, and needs oriented. Instruction which incorporates a high degree of reading and listening on the part of the students should be avoided. Learning activities such as demonstrations, field trips, supervised study, supervised practice, and individual projects should be used to a great extent. The use of colored transparencies, suitable work-books, slides, film strips, models, specimens, and other teaching aids which require the students to see, hear, touch, taste, and smell during the learning activity will enhance the student's abilities to learn and to retain what has been learned.

The following recommendations, based upon observation of teachers teaching the disadvantaged, will serve to provide further direction in planning and conducting an effective classroom situation.

1. Do not use the same lesson plans in teaching the disadvantaged which were developed and used for the regular instructional classes.
2. Do not expect the disadvantaged to learn at the same rate or achieve at the same level as other students in the vocational program.
3. Do not hurry the disadvantaged during any learning activity.
4. Do not assume that the disadvantaged students understand unexplained or unfamiliar terms or possess the basic knowledge required for various instructional areas.

5. Do not criticize disadvantaged students for things beyond their control.
6. Do not expect disadvantaged students to cover as much material as classes in the regular program have covered.
7. Do not expect the disadvantaged to comprehend the theory and philosophy underlying many agricultural instructional units.
8. Do not classify the disadvantaged as "dummies," as "second-rate citizens," or as unimportant in the instructional program.

A dedicated teacher utilizing student oriented learning activities focusing upon the needs and interests of the students will set the stage for an instructional program which will be of great value for developing salable skills and desirable behaviors in disadvantaged students.

Objectives of the Program

The specific objectives of a program designed for the disadvantaged must be determined by the local teacher; however, several general objectives are identified here to help assist the teacher in developing program objectives and day-to-day objectives. The objectives of a program designed for the disadvantaged are to assist the student to:

1. Understand himself or herself;
2. Adapt to group living -- family, school, community;
3. Develop personal traits for good citizenship and job success;
4. Develop elementary manipulative skills and job entry skills;
5. Develop effective communications and mathematics skills;
6. Develop an understanding of the importance of good health;
7. Understand personal money management;
8. Understand the concept of work and the satisfactions found in work;

9. Develop proper attitudes toward work and society as a whole;
10. Acquire a knowledge of occupational fields in the industry of agriculture;
11. Evaluate future occupational choices;
12. Explore employment opportunities in the industry of agriculture in the local community; and
13. Appraise his/her own interests, aptitudes, and achievements as related to occupational goals.

Using the Curriculum Guide in Teaching the Disadvantaged

The enterprises, units, and problem areas presented in this outline are intended to give teachers ideas and directions in selecting instructional units for classes of disadvantaged students. The instructional areas presented in this outline are not intended to be taught within the scope of one school year. The teacher should review this guide and select those enterprises, units, or problem areas which serve to meet the needs of the students in the local community.

To assist teachers in using this guide, several points should be made. Throughout this guide, some instructional areas are broken into enterprises and problem areas, while other instructional areas are divided into enterprises, units, and problem areas. The selection and teaching of each of these instructional areas are discussed below.

A. Enterprises and Problem Areas

The outline of problem areas developed under these headings provide maximum opportunity for flexibility in the instructional program. Once a teacher decides that an enterprise should be taught, only those problem areas which will help students meet

their needs should then be selected. For example, a teacher identified masonry (page 7) as an enterprise that should be covered with the students. In surveying the community and students' interests and needs, the teacher might select the following problem areas to teach:

1. Identifying tools, equipment, materials, and masonry units
2. Fitting and/or caring for tools, equipment, and materials
8. Developing safety habits
3. Preparing concrete and mortar mixtures
6. Laying blocks

APPLICATION - constructing a masonry project

- a. laying a cinder block wall
- b. cleaning tools
- c. mixing concrete and/or mortar mixture

B. Enterprises, Units, and Problem Areas

With instructional areas under this format, the teacher should teach all problem areas identified under the specific unit for maximum learning efficiency. For example, the teacher selects Farm Power and Machinery (page 13) as an enterprise and identifies the Unit, Operating a Tractor as an important segment of the instructional program. Thus, all four problem areas under the Unit on Operating a Tractor should be covered in one time span.

Regardless of which topical breakdown a teacher may select, each instructional segment should provide students the opportunity to practice what they have learned. In this guide, the section identified as APPLICATION lists some examples of projects that students may build to help develop their

skills. These learning activities may take place in the laboratory, in the classroom, on school farms, in the greenhouse, during field trips, or in supervised occupational experience programs.

Enterprise Instructional Topics

Enterprise: Masonry

- Problem Areas:
1. Selecting tools, equipment, and materials
 2. Identifying masonry units
 3. Fitting and/or caring for tools, equipment and materials
 4. Preparing concrete and/or mortar mixtures
 5. Constructing concrete forms
 6. Pouring and finishing concrete
 7. Laying blocks or bricks
 8. Estimating materials and costs
 9. Employing safety precautions

APPLICATIONS - Constructing a masonry project

- a. prepare concrete and/or mortar mixtures
- b. build forms
- c. pour walks, platforms, ramps, stepping stones
- d. lay a cinder block wall or a brick wall
- e. calculate a bill of materials
- f. clean tools
- g. build a footscrapers or mailbox post
- h. select appropriate tools, equipment and materials for projects completed

Enterprise: Electricity

- Problem Areas:
1. Describing electrical terms
 2. Selecting tools, equipment, and materials
 3. Fitting and/or caring for tools, equipment, and materials

4. Drawing simple wiring diagrams
5. Wiring a switch, light, and receptacle
6. Estimating materials and costs
7. Employing safety precautions

APPLICATION - Constructing an electrical project

- a. sketch a wiring diagram
- b. repair an extension cord, light cord, cord on electric clock, or cord on any electrical equipment
- c. wire a single pole switch
- d. make various wire splices
- e. make an electrical extension cord
- f. make a lamp or trouble light
- g. calculate a bill of materials
- h. select appropriate tools, equipment, and materials for projects completed

Enterprise: Plumbing

- Problem Areas:
1. Selecting tools, equipment, pipes, fittings, and supplies
 2. Fitting and/or caring for tools, equipment, and supplies
 3. Fitting pipe
 4. Maintaining the plumbing system
 5. Estimating materials and costs
 6. Employing safety precautions

APPLICATION - Constructing a plumbing project

- a. cut a pipe

- b. thread a pipe
- c. lay a water pipe
- d. calculate a bill of materials
- e. install a faucet or valve
- f. replace faucet washers, o-rings
- g. unclog drains
- h. select appropriate tools, equipment, and materials for projects completed

Enterprise: Woodworking

- Problem Areas:
- 1. Selecting tools, equipment, and wood
 - 2. Fitting and/or caring for tools, equipment, and supplies
 - 3. Sketching wood project plans
 - 4. Estimating materials and costs
 - 5. Constructing a wood project
 - 6. Employing safety precautions

APPLICATION - Constructing a wood project

- a. sketch a project
- b. calculate a bill of materials
- c. build a mailbox, toolbox, nailbox, miter box, coatrack, sawhorse, doghouse, fairbox, gunrack, picnic table, meat board, bookcase, duck boxes, book ends, tool cabinet, biltmore stick, bird feeders and houses, or other small projects useable by the student
- d. select appropriate tools, equipment, and materials for projects completed

Enterprise: Cold Metal

- Problem Areas:
1. Selecting tools, equipment, metal, and supplies
 2. Fitting and/or caring for tools and equipment
 3. Sketching the metal project
 4. Estimating materials and costs
 5. Constructing a metal project
 6. Employing safety precautions

APPLICATION - Constructing a metal project

- a. sketch a project
- b. make a bolt, gate brace, wagon box brace, or other small projects useable by the student
- c. calculate a bill of materials
- d. select appropriate tools, equipment, metal, and supplies for projects completed

Enterprise: Soldering and Sheet Metal

- Problem Areas:
1. Selecting tools, equipment, metal, and supplies
 2. Fitting and/or caring for tools and equipment
 3. Sketching the metal project
 4. Estimating materials and costs
 5. Using fluxes and cleaning materials
 6. Bending, shaping, and riveting
 7. Employing safety precautions

APPLICATION - Constructing a metal project

- a. sketch a project
- b. make a feed scoop, dust pan, or other small projects useable by the student
- c. calculate a bill of materials

- d. select appropriate tools, equipment, metal, and supplies for projects completed

Enterprise : Arc Welding

- Problem Areas:
1. Selecting tools, equipment, metals, and supplies
 2. Fitting and/or caring for tools and equipment
 3. Sketching the welding project
 4. Estimating materials and supplies needed
 5. Employing safety precautions
 6. Preparing metals
 7. Operating the welder
 8. Constructing a welding project

APPLICATION - Constructing a welding project

- a. sketch a project
- b. make a boot scraper, water trough, car ramps, wheel blocks, tree planting bar, animal feeding trough, hose hanger, towing bar, backstop goal, hitching pin, tractor bumper guard, or other small project useable by the student.
- c. calculate a bill of materials
- d. select appropriate tools, equipment, metals, and supplies for projects completed

Enterprise: Gas Welding

- Problem Areas:
1. Selecting tools, equipment, metals, and supplies
 2. Fitting and/or caring for tools and equipment
 3. Sketching the welding project
 4. Estimating materials and supplies

5. Employing safety precautions
6. Preparing metals
7. Operating the welder and cutting tip
8. Constructing a gas welding project

APPLICATION - Constructing a welding project

- a. sketch a project
- b. cut metal or pierce a hole to size
- c. cut welding pads
- d. repair scoop shovel, PTO shields, or other small projects useable by the student
- e. calculate a bill of materials
- f. select appropriate tools, equipment, metals, and supplies for projects completed

Enterprise: Painting

- Problem Areas:
1. Selecting tools, equipment, paints, and supplies
 2. Fitting and/or caring for tools and equipment
 3. Employing safety precautions
 4. Estimating materials and costs
 5. Painting wood and metal projects

APPLICATION - Painting a project

- a. calculate a bill of materials
- b. paint projects built by the students
- c. paint fences, buildings, equipment or other objects
- d. clean brushes
- e. select appropriate tools, equipment, paints, and supplies for projects completed

Enterprise: Farm Power and Machinery

Unit A: Operating a Tractor

- Problem Areas:
1. Employing safety precautions
 2. Identifying control levers and operation gauges
 3. Describing the purpose of control levers and gauges
 4. Attaching mounted or drawn equipment
 5. Operating a tractor

APPLICATION

- a. start a tractor engine
- b. drive a tractor
- c. attach plows, wagons, or other implements
- d. read operating gauges
- e. qualify for tractor operator's permit

Unit B: Maintaining a Tractor

- Problem Areas:
1. Lubricating a tractor
 2. Fueling a tractor
 3. Servicing the radiator and air cleaner
 4. Checking or replacing ignition system parts
 5. Adjusting the brakes
 6. Servicing the tires
 7. Servicing the air cleaner
 8. Troubleshooting tractor problems
 9. Selecting tools, equipment, and materials
 10. Employing safety precautions

APPLICATION

- a. grease a tractor
- b. change oil and oil filters, and check oil level
- c. change water in radiator (flush and drain)

- d. fill a gas tank
- e. set spark plug gaps
- f. replace spark plugs
- g. put air in tires
- h. winterize a tractor
- i. service an air cleaner
- j. select appropriate tools, equipment, and materials for activities completed

Unit C: Operating Agricultural Equipment (such as lawn mowers, chain saws, garden equipment, and farm machinery)

- Problem Areas:
- 1. Employing safety precautions
 - 2. Identifying control levers
 - 3. Describing the purpose of control levers
 - 4. Operating the equipment

APPLICATION

- a. start a lawnmower, power saw, or other engines
- b. operate lawnmowers, garden tractors, or other equipment
- c. qualify for machinery operator's permit

Unit D: Maintaining Agricultural Equipment

- Problem Areas:
- 1. Lubricating Equipment
 - 2. Servicing chains and belts
 - 3. Servicing tires
 - 4. Servicing other parts (such as shear pins and replacing twine)
 - 5. Selecting tools, equipment, and materials
 - 6. Employing safety precautions

APPLICATION

- a. grease equipment
- b. oil chains
- c. tighten belts
- d. change tires
- e. replace shear pins
- f. set up equipment - plows, discs, and other equipment
- g. select appropriate tools, equipment, and materials for activities completed

Unit E. Maintaining Electric Motors

- Problem Areas:
1. Lubricating motors
 2. Cleaning motors
 3. Servicing belts and pulleys
 4. Selecting tools, equipment, and materials
 5. Employing safety precautions

APPLICATION

- a. lubricate electric motors
- b. clean electric motors
- c. tighten belts
- d. change pulleys
- e. select appropriate tools, equipment, and materials for activities completed

Unit F: Repairing Small Engines

- Problem Areas:
1. Identifying types of engines
 2. Identifying engine parts

3. Selecting tools and equipment
4. Fitting and/or caring for tools
5. Replacing engine parts

APPLICATION

- a. disassemble a small engine
- b. overhaul a small engine
- c. trouble shoot a small engine
- d. tune-up a small engine
- e. select appropriate tools and equipment for activities completed

Unit G: Maintaining Small Engines

- Problem Areas:
1. Lubricating the engine
 2. Fueling the engine
 3. Cleaning the cooling system
 4. Checking the ignition system
 5. Checking the fuel system
 6. Troubleshooting engine problems
 7. Employing safety precautions
 8. Selecting tools and equipment

APPLICATION

- a. change the crankcase or air breather oil
- b. clean an engine
- c. clean an air filter
- d. select appropriate tools and equipment for activities completed

Enterprise: Farm Structures

Unit A: Planning and Constructing Farm Fences

- Problem Areas:
1. Determining type of fences
 2. Locating gates and fences
 3. Selecting fence materials
 4. Locating corner and line posts
 5. Estimating material needed

APPLICATION

- a. calculate a bill of materials
- b. construct woven wire fences
- c. construct barbed wire fences
- d. construct electric fences
- e. construct moveable fences
- f. construct board fences
- g. construct cattle guards

Enterprise: Large or Small Animals (For instructional purposes, select kind of livestock appropriate for class members and community)

Unit A: Feeding Animals

- Problem Areas:
1. Weighing and measuring feed
 2. Reading labels and directions
 3. Feeding the animals
 4. Watering the animals
 5. Keeping feed records

APPLICATION

- a. feed and water animals
- b. read labels
- c. keep a feed record book

Unit B: Caring for Animals

- Problem Areas:
1. Cleaning animal pens
 2. Disinfecting animal pens
 3. Bedding the animals
 4. Recognizing animal pests and diseases
 5. Exercising animals
 6. Grooming animals

APPLICATION

- a. make a rope halter and tie knots
- b. care for an animal
- c. groom an animal
- d. disinfect an animal pen

Enterprise: Crops (For instructional purposes, select crop appropriate for class members and community)

- Problem Areas:
1. Selecting the seed
 2. Preparing the seedbed
 3. Planting the seed
 4. Fertilizing at planting time
 5. Recognizing pests and diseases
 6. Applying supplemental fertilizer
 7. Operating and maintaining equipment
 8. Employing safety precautions in operation of equipment
 9. Harvesting the crop
 10. Storing the crop

APPLICATION

- a. prepare test plots or experimental plots
(plowing, preparing soil, and fertilizing)

- b. run germination tests
- c. fertilize crops

Enterprise: Soil and Water Management

- Problem Areas:
- 1. Describing need and value of erosion control
 - 2. Identifying types of erosion
 - 3. Recognizing effects of erosion
 - 4. Controlling erosion
 - 5. Securing technical advice
 - 6. Maintaining a pond
 - 7. Developing safety precautions around a pond

APPLICATION

- a. prepare test plots or experimental plots
- b. assist in the construction of a pond
- c. seed the dam of a pond, fertilize a pond
- d. construct safety devices around the pond
- e. eliminate cattails in a pond

Enterprise: Forestry

Unit A: Recognizing the Importance of Forests

- Problem Areas:
- 1. Identifying parts of a tree
 - 2. Identifying trees
 - 3. Describing value of forests
 - 4. Planting trees

APPLICATION

- a. identify trees around the school building, home, or in a local forest
- b. plant pine trees, hardwoods, or other trees
- c. identify soil erosion caused by an absence of trees

Unit B: Managing the Forest

- Problem Areas: 1. Selecting trees for intermediate cuttings
2. Selecting trees for harvest cuttings

APPLICATION

- a. identify trees that have market value
- b. identify trees that should be removed
- c. harvest mature trees

Unit C: Measuring Trees and Logs

- Problem Areas: 1. Describing units of measurement
2. Measuring trees

APPLICATION

- a. estimate lumber in standing trees
- b. estimate lumber in cut logs
- c. mark logs for sawing
- d. make a biltmore stick

Unit D. Protecting the Forest

- Problem Areas: 1. Controlling forest fires
2. Recognizing pests and diseases
3. Recognizing damage done by animals

APPLICATION

- a. design and construct forest fire prevention devices
- b. identify unhealthy trees
- c. become a member of KVG (Keep Virginia Green)

Unit E: Growing and Marketing Christmas Trees

- Problem Areas:
1. Selecting sites
 2. Selecting varieties
 3. Planting Christmas trees
 4. Pruning and shaping
 5. Harvesting
 6. Typing and marketing

APPLICATION

- a. plant Christmas trees
- b. prune Christmas trees
- c. shape Christmas trees
- d. cut Christmas trees
- e. prepare Christmas trees for marketing
- f. sell Christmas trees

Enterprise: Conservation

Unit A: Conserving Wildlife and Their Habitats

- Problem Areas:
1. Identifying fish and their habitats
 2. Identifying birds and their habitats
 3. Identifying animals and their habitats

APPLICATION

- a. identify fish, birds, and/or animals around their homes, schools and community

Unit B: Controlling Pollution

- Problem Areas:
1. Controlling air pollution
 2. Controlling water pollution
 3. Controlling land pollution

APPLICATION

- a. identify pollution around the community
- b. correct pollution sources

Unit C. Managing Wildlife Populations

- Problem Areas:
1. Stimulating populations
 2. Propagating wildlife by artificial methods
 3. Understanding and obeying game regulations
 4. Trapping of live animals
 5. Tagging animals, birds, and fish
 6. Controlling predators
 7. Recognizing diseases and pests

APPLICATION

- a. trap rabbits and fish
- b. tag pigeons
- c. build wildlife shelters
- d. build wildlife feeding patches
- e. complete a gun hunter safety course

Enterprise: Outdoor Recreational Area Opportunities

Unit A: Maintaining Camp Grounds and Parks

- Problem Areas:
1. Maintaining rest rooms
 2. Maintaining refuse disposal
 3. Checking water supplies
 4. Maintaining cooking facilities
 5. Caring for park or campground area

APPLICATION

- a. test water

- b. clean up a campground
- c. take a camping trip

Unit B: Operating and Maintaining Hiking and Riding Trails

- Problem Areas:
- 1. Marking and clearing trails
 - 2. Bridging creeks or ravines
 - 3. Constructing rest rooms
 - 4. Employing safety precautions

APPLICATION

- a. construct trails
- b. build bridges
- c. build rest rooms

Unit C: Operating and Maintaining Riding Stables

- Problem Areas:
- 1. Maintaining riding equipment
 - 2. Constructing and maintaining trails
 - 3. Developing camping sites and setting up equipment
 - 4. Housing stock
 - 5. Feeding stock
 - 6. Developing horsemanship
 - 7. Employing safety precautions

APPLICATION

- a. service riding equipment
- b. construct riding trails
- c. build a camp site
- d. ride horses

Unit D. Operating and Maintaining Marinas

- Problem Areas:
1. Maintaining docks
 2. Developing launching sites
 3. Launching boats
 4. Employing safety precautions
 5. Describing laws governing operation of boats

APPLICATION

- a. paint boat docks
- b. build a launch site
- c. launch a boat

Enterprise: Horticulture (For instructional purposes, select plants appropriate for class and community)

Unit A: Propagating Horticulture Plants

- Problem Areas:
1. Selecting tools and equipment
 2. Producing plants from seed
 3. Reading labels
 4. Germinating seed
 5. Planting the seed
 6. Caring for the seedlings

APPLICATION

- a. plant marigolds
- b. read a seed package label
- c. test germination of seeds
- d. plant a test plot
- e. select appropriate tools and equipment for

activities completed

Unit B: Propagating Plants from Cuttings

- Problem Areas:
1. Identifying types of cuttings
 2. Describing factors which affect success of cuttings
 3. Making various cuttings
 4. Preparing cuttings for rootings
 5. Placing cuttings in rooting media
 6. Caring for the cuttings
 7. Selecting tools and equipment

APPLICATION

- a. perform various cuttings
- b. root plants
- c. plant a test plot
- d. grow geraniums
- e. select appropriate tools and equipment
for activities completed

Unit C: Propagating Plants by Layering

- Problem Areas:
1. Describing differences in layering and cuttings
 2. Identifying kinds of layering
 3. Caring of new plants before planting

APPLICATION

- a. start a grapevine or forsythia

Unit D: Propagating Plants by Budding and Grafting

- Problem Areas:
1. Describing methods of budding
 2. Grafting of plants
 3. Caring for grafted plants
 4. Selecting tools and equipment

APPLICATION

- a. bud a rose
- b. graft a peach tree
- c. select appropriate tools and equipment for activities completed

Unit E: Constructing Plant Propagation Containers and Equipment

- Problem Areas:
1. Constructing flats and planting boards
 2. Employing safety precautions

APPLICATION

- a. build a lath house

Unit F. Growing Horticulture Plants

- Problem Areas:
1. Caring for plants
 2. Transplanting plants

APPLICATION

- a. grow carnations
- b. transplant tomatoes

Unit G: Using Soil and Other Plant Growing Media

- Problem Areas:
1. Using soil medias in growing plants
 2. Identifying soil conditioners
 3. Preparing soil mixtures
 4. Using soil mulches in growing plants
 5. Controlling erosion by using plant growing media

APPLICATION

- a. mix soil
- b. apply mulch to gardens
- c. develop test plots to study erosion
- d. operate a soil shredder

Unit H: Constructing, Maintaining, and Using Plant Growing Structures

- Problem Areas:
1. Identifying and using plant growing structures
 2. Identifying and using types of heat
 3. Identifying and using air cooling systems
 4. Operating plant growing equipment

APPLICATION

- a. water plants
- b. regulate temperature

Enterprise: Landscaping

Unit A: Establishing Lawns and Turf

- Problem Areas:
1. Selecting tools and equipment
 2. Preparing the seed bed
 3. Describing the differences in lawn grasses
 4. Seeding lawns
 5. Transplanting turf
 6. Transplanting shrubs
 7. Caring for and maintaining tools and equipment

APPLICATION

- a. rake and level a lawn
- b. sow lawn grass seed
- c. grow bluegrass, fescue, or other grasses
in a test plot or planter
- d. clean lawn tools
- e. transplant shrubs or sod
- f. select appropriate tools and equipment for
activities completed

Unit B: Maintaining Lawns and Turfs

- Problem Areas:
1. Selecting tools and equipment
 2. Mowing the lawn
 3. Fertilizing the lawn
 4. Aerating the lawn
 5. Watering the lawn
 6. Controlling pests of lawn
 7. Caring for and maintaining tools and equipment

APPLICATION

- a. mow a lawn, section of a school ground, or other area
- b. fertilize a test plot
- c. select appropriate tools and equipment for activities completed

Unit C: Repairing or Renovating Lawns

- Problem Areas:
1. Identifying causes of deterioration
 2. Selecting tools and equipment
 3. Repairing or renovating lawns
 4. Caring for and maintaining tools and equipment

APPLICATION

- a. identify areas of poor lawns around school grounds
- b. renovate an area identified in (a) above
- c. select appropriate tools and equipment for activities

Enterprise: Personal Development

- Problem Areas:**
1. Developing oneself
 2. Applying for a job
 3. Interviewing for a job
 4. Managing money
 5. Developing human relations
 6. Giving a speech
 7. Describing purposes of the FFA

APPLICATION

- a. complete job application forms
- b. telephone a friend or employer
- c. complete a self-evaluation checksheet
- d. give a short speech
- e. become a member of the FFA
- f. accept an FFA committee assignment

Enterprise: Agribusiness Skills

- Problem Areas:**
1. Operating a cash register
 2. Preparing sales tickets
 3. Reading sales tax charts
 4. Reading labels
 5. Identifying size of containers
 6. Assisting customers and making sales
 7. Unloading products
 8. Storing products
 9. Weighing product or livestock
 10. Marking prices on products
 11. Inventorying products

12. Employing safety precautions
13. Describing procedures to follow in case of accidents
14. Collecting soil samples
15. Describing kinds of feeds
16. Describing kinds of fertilizers
17. Describing kinds of fuels and lubricants

APPLICATION

- a. write up a sales slip
- b. weigh corn
- c. take soil samples
- d. make change

Enterprise: Career Opportunities

- Problem Areas:
1. Identifying opportunities on livestock farms
 2. Identifying opportunities on crop farms
 3. Identifying opportunities in forestry
 4. Identifying opportunities in seafood companies
 5. Identifying opportunities in manufacturing
 6. Identifying opportunities in distribution
 7. Identifying opportunities in farm services
 8. Identifying opportunities in food processing
 9. Identifying opportunities in sales and service
 10. Identifying opportunities in recreation
 11. Identifying opportunities in wildlife
 12. Identifying opportunities in horticulture

APPLICATION

- a. identify farming opportunities in community
- b. list types of jobs available in a local cooperative

- c. identify types of agribusiness in local community
- d. identify agriculturally related jobs available
- e. take field trips

Enterprise: Gardening

- Problem Areas:
1. Describing needs and values of home garden
 2. Selecting the location of a garden
 3. Selecting crops, varieties, seeds, and plants
 4. Estimating seed and fertilizer
 5. Preparing the soil
 6. Fertilizing the soil
 7. Planting the seeds
 8. Controlling the pests
 9. Watering the plants
 10. Harvesting the vegetables
 11. Constructing and using hotbeds and cold frames

APPLICATION

- a. plant sweet corn
- b. plant a garden
- c. prepare the seedbed

Enterprise: Home Beautification

- Problem Areas:
1. Maintaining driveways
 2. Maintaining walks
 3. Maintaining the house and general repair

APPLICATION

- a. grade a driveway

- b. repair a walk
- c. replace windows, glaze, and caulk
- d. repair roofs
- e. repair eaves and downspouts
- f. adjust latches and doors

Occupations for the Disadvantaged

In this section of the curriculum guide, several occupations have been identified which could possibly provide successful employment for the disadvantaged student. In reviewing these occupations, you may find some which you feel would be too advanced for a disadvantaged individual. However, we must realize that there are various levels or degrees to which an individual is disadvantaged. Thus, any occupation identified below may be desirable and attainable by some individuals and not by others.

Masonry Helper
Brick Layer
Concrete Truck Driver
Electrician's Helper
Plumber's Helper
Carpenter's Helper
Agricultural Machinery Sales
and Service Helper
Welder (Arc and Gas)
Painter's Helper
Painter
Farm Laborer
Pulp Wood Cutter
Machinery Set-up Man
Machinery Service Man

Small Engine Repairman
Farm Building Construction
Worker
Veterinarian Animal Caretaker
Campground Caretaker
Park Caretaker
Riding Stable Employee
Marina Employee
Nurseryman's Helper
Greenhouse Helper
Landscape Employee
Golf Course Employee
Salesman
Gardener
Self-Employed

Relating Occupations to the Curriculum Guide

Assume that you as a teacher determine a need in your community for carpenters' helpers. In conducting the classes for the disadvantaged, you stimulate interest in the students concerning woodworking and occupations relating to woodworking.

A review of the Table of Contents provides directions as to possible instructional topics. These are:

- Woodworking
- Painting
- Personal Development
- Agri-business Skills

Once these are identified, the teacher must then select which problem areas would best serve to prepare the students for an occupational opportunity. In addition to reviewing the woodworking section, additional topics may be identified under other areas, such as painting. Problem areas included under personal development and agri-business skills would also need to be considered in teaching any topic to the disadvantaged.