



Lesson HS.124

SEVEN ROADS TO SUCCESS: CHOOSING MY ROAD

Unit. Supervised Agricultural Experience

Problem Area. Developing My SAE Program

Precepts. F5: Acquire new knowledge

N4: Choose a career based on passion, abilities and aptitudes

National Standards. NSS-EC.9-12.13 — Income and Earning — Understand that in a labor market, in the absence of other changes, if wage or salary payments increase, workers will increase the quantity of labor they supply or firms will decrease the quantity of labor they demand.



Student Learning Objectives. As a result of this lesson, the student will ...

- 1 Identify the seven career cluster areas in agriculture.

- 2 Describe the agricultural cluster areas.
- 3 Select one or two cluster areas to further explore and investigate.



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 **Time.** Instruction for this lesson: 50 minutes.

Resources

“Preparing for Career Success in Agriculture, Food, and Natural Resources,”
www.careerclusters.org

Tools, Equipment, and Supplies:

- ✓ Overhead Projector
- ✓ Agriculture, Food, and Natural Resources brochures
- ✓ HS.124.TM.A
- ✓ HS.124.TM.B
- ✓ HS.124.TM.C
- ✓ HS.124.TM.D
- ✓ HS.124.Assess—one per student

 **Key Terms.** The following terms are presented in this lesson and appear in bold italics:

- ***Agriculture***
- ***Food***
- ***Natural Resources***



Interest Approach

Career Clusters probably will not light a fire of enthusiasm in your students. As you think about how to teach this, continue to focus on discovery, exploration, and adventure. Capture the students' imaginations with the unknown. Make it an unfolding mystery for them to solve.



We have discussed in great detail a new definition of agriculture and career planning. The next step is for us to begin focusing on the roads you can take to success. Today's lesson is a trip to discover where new roads of "thinking" can lead us, so do not be shy. Let's get ready to discover which road interests you.

Give each student a few minutes to develop a list of all of the agricultural careers they can think of. Encourage each student to list at least 10 careers in agriculture. After their lists are complete, they need to get a student partner, compare lists, and develop a new combined list. If they think of any new careers, they can add those as well.

Have each two person team share with the class the number of careers they identified. Who had the most? Are there any careers on their list for which they are uncertain? Give a couple of minutes for discussion. Have the students keep their lists for use later in the lesson.



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Here is how we are going to begin today's lesson. First, I want you sit quietly for the next few minutes and list in your notebook as many agricultural careers as you can think of. You have two minutes. Go!



Now that everyone has his or her list, I want you to pick a partner and compare lists. Make a new combined list. You can use each item only once. You have two minutes. Ready, set, go!



Now I want each two person team to share with us the number of careers you have listed. Let's keep a count on who has the most! Did you find some careers on your partner's list that you

were not sure were agricultural careers? Would anyone like to share one?

Give a minute or two for discussion and responses.



Keep your lists for use later in the lesson.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

Objective 1. Identify the seven career cluster areas in agriculture.



Have you ever been on a trip somewhere and gotten lost. Did you have a map? What did you do? How did you finally get to your destination?

Allow students to respond; you may get some funny stories.



Today we are going to learn about seven roads in agriculture that can lead you to career success.

I. What are the opportunities in agriculture?



Today, we will begin by looking at a definition that should become familiar to you.

Provide students with the definition of agriculture, food, and natural resources on a writing surface or use HS.124.TM.A and have student capture in their notes:

A. **Agriculture, food, and natural resources** is defined as careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical, and educational services.

Show HS.124.TM.B.

Take each key word (planning, implementation, production, management, processing, and/or marketing) of the definition and explore the following questions with the class:



What would a person in _____ do?

What kinds of skills would a person in _____ need?

What level of education would a person in _____ need?

If you would like doing _____, raise your hand.



These are all key components of careers in agriculture. Let's look at what types of activities you like to do. Of these six terms, which ones are most interesting to you? Select three and write them in your notebook.



Now I want each of you to get a partner and share the three words you selected and the reason you selected them. Ask your partners what they think about your selections. Are their selections different? Why did they select the three components they did?

Next, have the students focus on these terms: food, fiber, wood products, natural resources, horticulture, and plant/animal products. See how they would define these terms. Facilitate some class discussion on these terms. Make sure the students have a grasp on the terms.

Show HS.124.TM.C.



Agriculture can be divided into many different sectors. Key sectors include food (what we eat), fiber (what we wear), wood products (what we live in and write on), natural resources (the beauty around us), horticulture (the color of our natural world), and plant/animal products (the medicines, household products that make our lives better). For which of these areas do you need some more explanation? It is important that you understand how big agriculture is.

Utilize a Hieroglyphics Moment with your students. Have your students illustrate the various concepts they have learned up to this point. This depiction should encompass all of agriculture as they know it to this point.

Students need to understand the organization of agricultural careers into the seven cluster areas. Using HS.124.TM.D, show them the seven cluster areas and three to five sample occupations of each.

Seven Career Clusters in Agriculture, Food, and Natural Resources:

- *Food Products and Processing Systems—Food Scientist, Toxicologist, Meat Processor*
- *Agribusiness Systems—International Agri-Marketing Specialist, Farm/Ranch Manager, Agricultural Economist*
- *Environmental Service Systems—Toxicologist, Water Quality Manager, Environmental Sampling Technician*
- *Natural Resources Systems—Wildlife Manager, Park Manager, Fisheries Manager*
- *Power, Structural, and Technical Systems—Agricultural Engineer, Machinist, Welder, GPS Technician*
- *Animal Systems—Poultry Manager, Feed Sales Representative, Animal Scientist*
- *Plant Systems—Tree Surgeon, Botanist, Greenhouse Manager*



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Make sure students have a grasp on the different options they have in agriculture. See if they can name other careers not listed on the transparency and identify which category they should go into.

Objective 2. Describe the agricultural cluster areas.

II. How are agricultural careers organized?

Write all seven career cluster areas across the top of the board and put columns under each heading. Have the students who worked in pairs for the interest approach portion of the lesson come forward to the board and write their careers under the correct heading. As students have difficulty, offer them some assistance.

The important part of this exercise is to help them understand the classification system of career clusters. After they return to their seats, review each column and make sure, along with the students, that each career is correctly identified. Take a few minutes to clarify any questions or differences of opinion they may have on the classification. Reinforce that the cluster system is an organizational tool they can use for identifying career areas of interest to them.



On the board, we listed the seven career cluster areas in agriculture. Earlier in this lesson, you and your partner identified careers in agriculture. Your assignment is to come to the board and write your careers under the correct category. Please work quietly. Return to your seat after you have finished and see what your classmates are listing on the board. See if you agree with how they categorize their careers. You may start now.

Monitor and assist students as they are working at the board. Keep students focused on reviewing the work of their classmates as they finish.



Do you see anything we should change? Are all of the careers categorized correctly? Are there any questions? We really need to understand the different clusters/roads within agriculture if we are to be successful in the next step. Any questions?

Objective 3. Select one or two cluster areas to further explore and investigate.

III. Identifying your interest area

You need to give students time to think through and reflect carefully on the decisions they are making. Make sure they understand they can change their minds. They are not locked into this forever. This is a process to help them explore their opportunities and interests. This is very important in guiding students.

Have each student select one or two career cluster areas he or she would like to learn more about. Based on their selections, provide each student with a copy of their cluster areas as printed in the Agriculture, Food, and Natural Resources brochure. Have students take some time to read through the materials and to make note of specific careers that interest them. They

should also make notes on the types of experiences and education they think would be helpful to them in preparing for a career in that area.





Your next assignment is to select one or two cluster areas that interest you. You can select any of these areas, not specific careers necessarily, that you want to learn more about. They are Agribusiness Systems; Environmental Service Systems; Natural Resources Systems; Power, Structural, and Technical Systems; Animal Systems; Plant Systems.

Now have the students do a Descartes Moment to facilitate thinking through their decisions. Have the students give these to you for review and return to them later. This will be an asset to you as you provide them with career guidance.



Review/Summary

Have students answer the following questions in their notebooks:

Define agriculture, food, and natural resources.

What is a career cluster?

What career cluster(s) (no more than 2), are you interested in pursuing?



Application

►Extended Classroom Activity:

Have the students explore the Internet for more information on the career cluster areas they are interested in and share their findings with the class.

►FFA Activity:

Have the students identify three FFA activities that would be beneficial to them in preparing for a career in their chosen career cluster area.

►SAE Activity:

Not applicable.



Evaluation

A written test, HS.124.Assess, is provided to measure the objectives of this lesson.



Answers to Assessment:

Answers may vary.

- Food Products and Processing Systems—Food Scientist, Toxicologist, Meat Processor
- Agribusiness Systems—International Agri-Marketing Specialist, Farm/Ranch Manager, Agricultural Economist
- Environmental Service Systems—Toxicologist, Water Quality Manager, Environmental Sampling Technician
- Natural Resources Systems—Wildlife Manager, Park Manager, Fisheries Manager
- Power, Structural, and Technical Systems—Agricultural Engineer, Machinist, Welder, GPS Technician
- Animal Systems—Poultry Manager, Feed Sales Representative, Animal Scientist
- Plant Systems—Tree Surgeon, Botanist, Greenhouse Manager



HS.124.Assess Name: _____

SEVEN ROADS TO SUCCESS: CHOOSING MY ROAD

Identify three to five careers for each of the following clusters:

Food Products and Processing Systems

Agribusiness Systems

Environmental Service Systems

Natural Resources Systems

Power, Structural, and Technical Systems

Animal Systems

Plant Systems



HS.124.TM.A

AGRICULTURE, FOOD, AND NATURAL RESOURCES IS DEFINED AS ...

careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical, and educational services.



HS.124.TM.B

Planning–Implementation–Production– Management– Processing–Marketing

Take each key word (planning, implementation, production, management, processing, and/or marketing) of the definition and explore the following questions:

- ◆ **What would a person in _____ do?**
- ◆ **What kinds of skills would a person in _____ need?**
- ◆ **What level of education would a person in _____ need?**
- ◆ **If you would like doing _____, raise your hand.**



KEY WORDS TO UNDERSTAND

- ◆ **Food—**
- ◆ **Fiber—**
- ◆ **Wood Products—**
- ◆ **Natural Resources—**
- ◆ **Horticulture—**
- ◆ **Plant Products—**
- ◆ **Animal Products—**



SEVEN CAREER CLUSTERS IN AGRICULTURE, FOOD, AND NATURAL RESOURCES

- ◆ **Food Products and Processing Systems—Food Scientist, Toxicologist, Meat Processor**
- ◆ **Agribusiness Systems—International Agri-Marketing Specialist, Farm/Ranch Manager, Agricultural Economist**
- ◆ **Environmental Service Systems—Toxicologist, Water Quality Manager, Environmental Sampling Technician**
- ◆ **Natural Resources Systems—Wildlife Manager, Park Manager, Fisheries Manager**
- ◆ **Power, Structural, and Technical Systems—Agricultural Engineer, Machinist, Welder, GPS Technician**
- ◆ **Animal Systems—Poultry Manager, Feed Sales Representative, Animal Scientist**
- ◆ **Plant Systems—Tree Surgeon, Botanist, Greenhouse Manager**



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