

Overview

Students will become familiar with many agriculture-related careers and the impact agriculture has on U.S. population. In researching and giving a talk about chosen careers, students will learn how important agriculture-related careers are.

Objectives

- 1. Students will understand agriculture is the nation's number one industry.
- 2. Students will understand one out of every seven jobs in the U.S. is related to agriculture.
- 3. Students will discover some of the 250 careers available in agriculture.
- 4. Students will discover the foundation skills needed for agriculture careers.

Suggested Grade Level:

5th-6th

Time: Two 40 minute sessions

Subjects: Language Arts Creative Writing Reading

Background Information

Agriculture is the nation's largest industry, and includes over 250 career areas. Approximately 22 million people in the U.S. have jobs connected to agriculture – that's 15% of all the jobs in the U.S. These people work to provide food, clothing, fuel, building materials, and many other products to the rest of society.

Less than < 2% of the population in the U.S. is involved in production agriculture. The remaining positions are involved in the food processing, transportation, inspection and safety, marketing, economics, engineering, science and research. One in seven people are involved in these types of careers.

It is amazing that less than two percent of the U.S. population is involved in production agriculture. That means this small percentage feeds, clothes, and provides many items for the rest of us! This is quite different from how many people in an underdeveloped country are relied upon to feed their population.

Approximately 70% of jobs in poverty stricken countries are related to food production. Many people in poverty-stricken countries live a very basic life where much of their time is spent growing food and preparing it for their own consumption. Farming methods and tools are very basic. Poor infrastructure such as bad roads, small trucks, lack of refrigeration, lack of trucks, trains, and storage units prohibit movement of agriculture produce to larger populations. Lack of good marketing systems translates to low or no profit for the farmers.

www.ksagclassroom.org

Kansas Foundation for Agriculture in the Classroom

<u>Materials</u>

- Newspaper
- Duct tape
- Scissors
- Careers Vocabulary
- Copies of Student Handout A: KWL Chart
- Copies of Student Handout B: What Makes a Good Presentation?
- Copies of Student Handout C: Speech Score Sheet

Preparation

- 1. Obtain a copy of the Exploring Kansas Natural Resources Educator's Guide located on our website.
- 2. Arrange computers for students or print full-page color copies from USDA Living Science: Food, Agriculture and Natural Resource Careers (www.agriculture.purdue.edu/USDA/Careers).
- 3.Create a display board with a few of the colorful pictures agricultural careers from USDA Living Science: Food, Agriculture and Natural Resource Careers.
- 4. Collect old newspapers and obtain several rolls of duct tape or masking tape and scissors.

Instructional Format

- 1. To capture students' curiosity, set up a display board with colorful pictures of people involved in agriculture careers. These pictures are available from USDA Living Science: Food, Agriculture and Natural Resource Careers (www.agriculture.purdue.edu/USDA/Careers).
- 2. Students will conduct research, engage a career discovery activity, and use their communication skills.
- 3. Upon completing the lesson, students will organize their thoughts, write creatively, and give a speech to their peers about the career they selected. Their presentation should "market" their career choice.
- 4. Upon completing the lesson, students will answer the conclusion questions and discuss the activity.



Procedures

- 1. Distribute Student Handout A: KWL Chart to students and have them complete "K" and "W" of the chart regarding careers in agriculture.
- 2. Share background information with students.
- 3. Instruct students to pick an agriculture career to research from the USDA Living Science: Food, Agriculture and Natural Resource Careers posters (www.agriculture.purdue.edu/USDA/Careers).
- 4. Students may do further research on the web or conduct face-to-face or phone interviews with persons in their agriculture career of interest.
- 5. Students will create, from newspaper and duct tape, props that represent the career they have researched. Example: tie, billfold and paper money for an agriculture economist or an agriculture banker; or a soil probe and a shovel for a soil scientist.
- 6. Students will present a five-minute presentation about the career they have researched, using props to illustrate their points. Student Handout B: What Makes a Good Presentation? and Student Handout C: Presentation Score Sheet should be shared with them.
- 7. Students will answer conclusion questions and complete the "L" on their KWL Charts.

Conclusion Questions

1. Why is agriculture important to our nation?

Agriculture is the nation's largest industry covering over 250 career areas. Approximately 22 million people have jobs connected to agriculture – that's 15% of all the jobs in the U.S. People involved in agricultural careers feed, clothe and provide other items for the nation's population.

2. Why is agriculture and our infrastructure in the U.S. important to our society?

People involved in agricultural careers feed, clothe and provide other items for the nation's population. This allows others to pursue other careers since they don't have to worry about food. Good infrastructure like good roads, big trucks, and availability of trucks, trains and storages units (some with refrigeration) allows the movement of agriculture produce across the country.

3. What are two careers in agriculture that you find interesting? Explain why.

Answers will vary from student to student.

4. If you were to pursue a career in agriculture, what would it be?

Answers will vary from student to student.

5. What surprised you the most about this topic?

Answers will vary from student to student.

In addition, the Student Handout A: KWL Chart and Student Handout C: Presentation Score Sheet may be used as assessment tools.

6. Upon completing the lesson, students will answer the conclusion questions and discuss the activity.



Vocabulary

Agriculture: The production, processing, marketing, and use of foods, fibers, shelter and other products that come from plants and animals.

Career: Long-term, lifelong job; builds upon several jobs in an interest area.

Infrastructure: A system that supports something. *In agriculture this would be a system that supports production, processing, storing and movement of agriculture products.*

Job: Occupation, profession. *Types of prerequisite classes needed in high school to build a firm foundation for a career in agriculture.*

Agriculture Science: The study of plant, animal, soil and food science. A high school class offering that demonstrates the presence of science in agriculture production, processing and marketing.

Art/Performing Arts: Creating beautiful things; theatre art, music performance. *Art may be necessary in communicating major agricultural messages to people. It can be used to market a product, tell a story or communicate history. It appeals to human emotions.*

English: The study of communication using the English language. *To be successful in an agriculture career, you need to be able to read, write and speak well.*

Foreign Language: A language different from one's main language. To be successful in an agriculture career, it is becoming more necessary to speak more than one language so you can communicate with others are we produce, process and market agriculture products in a global economy.

Geography: The study of earth's physical features. To be successful in an agriculture career, you need to have an understanding of areas and regions in our state, country and world. Weather, soil type, water resources and infrastructure that support production agriculture and the processing and marketing of agriculture products affect each of these areas differently.

History: The study of past events. To be successful in an agriculture career, you need to be able to use math to care for the plants, land and animals properly as you supply their daily needs of food, water, shelter and space. Math is also needed in agricultural economics for lending or marketing purposes. Math is needed as engineers design machinery and other systems for agriculture.



KWL Chart

Name: _____

K	W	L			
What I know about	What I want to know about	What I learned about			
agriculture careers	agriculture careers	agriculture careers			
5					



Presentation

Purpose: To inform your audience about your selected agricultural career. **Goal:** Share a talk 3-7 minutes in length.

Parts of a Talk

All talks have three parts: an opening or introduction, the body that presents the information and a short summary that highlights the main points of the talk.

The **introduction** is the opening statement. It should catch the audience's attention by doing one of the following:

- Ask a question
- Show an object or a picture
- Tell a startling fact
- Make a challenging statement
- Tell a story

The **body** is the main part of the talk. It should be 80 to 90 percent of your talk. First, tell what the main idea of your talk will be. Then explain or illustrate important facts while developing the main idea.

Lastly, the **summary** or conclusion. Repeat just a few of the major points. A quotation, poem or saying might be used at the close.

Tips for you as a speaker

- Dress appropriately
- Practice good
- Outline you talk, but never read your talk. You may want to write your notes on a 3" x 5" index cards for easy use.
- First, practice by yourself. Practcing in front of a mirror can help. Later, have someone listen who will offer suggestions for improving it. Never memorize your talk. Memorize your outline instead.
- · Speak slowly and with good volume.
- Don't use words you can't pronounce or understand.
- Use poster boards or visuals if they enhance the presentation.
- Smile.
- Be at ease, be yourself and be enthusiastic.

Adapted from Communications Fact Sheet 2.0 4H979 (2009) by Waldren and Adams. K-State Reasearch and Extension Publication.



Speech Scoresheet

Items to	Points	Earned	Teacher Comments	
Consider	Possible	Points	Well Done	Could Improve
Subject Matter	40			
Covered in 7-10 minutes				
 Information is accurate 				
 Information is complete 				
 Information is up-to-date 				
Sources are recognized				
Appearance	10			
Well Groomed				
Good Posture				
Organization of Presenta-	25			
tion				
Introduction				
Strong				
 Catches attention 				
 States purpose of talk 				
Body				
State main point				
 Develops main idea 				
using facts, examples/				
illustrations				
Summary				
Reviews main points				
Leaves the audience a				
challenge or interesting				
fact or quote				
Delivery of Presentation	25			
•Voice is loud and clear				
• Talked at a natural speed				
Used vocabulary that is				
east to understand				
Was at ease				
Was pleasant				
Was enthusiastic				

Adapted from Project Talk Scorecard. K-State Research and Extension Publication

