

# BUS: Farming: It's a Fact (Ag)

## Summary

Students will explore eight Career and Technical areas and make connections with business, family and consumers, and technology. Students will also examine the scope and importance of agriculture and some of the skills that are necessary for careers in agricultural business.

## Time Frame

3 class periods of 45 minutes each

## Group Size

Large Groups

## Life Skills

Thinking & Reasoning

## Materials

- Computer Lab or Computer & Projector for Presentation
- Computer Speakers or Headphones
- Computer Internet Access or Agricultural Technologies and Edutainment Software (available from [Utah AITC website](#))
- Farm Facts Booklets (1 for every two students, available from [Utah AITC website](#))
- Software (such as MicroSoft PowerPoint and Excel) or Graph Paper that will allow students to create charts and graphs
- Copies of handouts and transparency masters
- Ten Grocery Items with Receipt
- Calculators (hand-held or computer accessory)
- "Ag Overload Score Card" for each player or team

## Background for Teachers

The story of modern agriculture is highlighted by current facts. This lesson utilizes the current issue of [Farm Facts](#), produced by the American Farm Bureau Federation. This publication is updated every two years (next revision 2007, 2009, etc.). It is suggested that you purchase a classroom set of [Farm Facts](#) from Utah AITC website.

American agriculture is the story of American business. Agriculture has been around for over 10,000 years. Several agricultural revolutions have occurred that today enable each U.S. farmer to feed themselves and 144 other people here or around the world.

Two hundred years ago 98 percent of the population worked on farms. Today in the United States technology and other scientific discoveries have left less than 2 percent of our population working on the farm to produce the raw food and fibers that we use every day. Advancements in plant and animal science, food storage techniques and machines, fertilizers and crop protection chemicals, numerous computer applications and modern machines have transformed American agriculture into the most productive food and fiber producing system in the world, and kept the price of food the lowest of any nation.

The following activities are designed to give your students an introduction to the scope and

importance of agriculture and some of the skills that are necessary for careers in agricultural business. Students will need to be somewhat familiar with MS Office programs such as PowerPoint and Excel.

### Intended Learning Outcomes

Examine and describe how agriculture and natural resources impact our quality of life.

Recognize and explain how the agricultural system works (production to consumption) and identify related corresponding careers in agricultural and forestry production, education, communication and government services, management and business, and scientific and engineering opportunities, including career educational requirements and salary ranges. Compare facts and opinions concerning agricultural processes, economics (supply and demand), and science (e.g. nutrition, trade, environment, food contaminants, and food safety).

### Instructional Procedures

#### **Activity 1: Farm Facts or Opinion**

Preview the [Farm Facts](#) booklet identifying with the students the different types of graphs used in the publication (bar graphs, pie charts, line graphs, etc.).

Pick a couple of pages in the [Farm Facts](#) booklet and ask students if the data on the pages could be displayed utilizing a different type of graph. Ask "What is the graph saying?" "What is it not saying?"

Ask students to complete the ***Farming: It's a Fact*** worksheet using the [Farm Facts](#) booklet. You may want to tell students the page numbers where they will find the requested information.

[Farm Facts](#) is updated every two years (2007, 2009, 2011). Be sure you are using the most current booklet to have the most accurate data; this also means the page numbers may change in new booklets. This activity is great preparation for the "Ag Overload" game.

#### **Activity 2: Who Gets Your Food Dollar?**

Bring a bag of ten grocery items and a receipt that itemizes the cost of each item.

Using the receipt and a transparency pen, fill out the ***Itemized Grocery List*** transparency master, and share it with the students.

Review with the students the "Where Your Food Dollar Goes" graph in the [Farm Facts](#) booklet. For each of the ten grocery items, ask students to compute how much each off-farm item (agribusiness) costs and how much was returned to the farmer or rancher for each item (

***Where Does Your Food Dollar Go*** worksheet). You may want to demonstrate how to make the calculations for the first item.

#### **Activity 3: Ag Overload**

Access the "Ag Overload" computer program either online (streaming from the web) at [https://utah.agclassroom.org/htm/ag\\_games](https://utah.agclassroom.org/htm/ag_games) or by [purchasing the media](#) from the same site and installing the program on your lab computers. Utah teachers will receive a password for free access. Request this password 24 hours prior to accessing the site. The game is easy to play but you may want to demonstrate how to use the "Ag Overload" program in front of the entire class using an LCD projector. Speakers are also required. If only one computer is available for the activity, divide the class into teams and play the game as an entire class. If you have a computer lab proceed with the following activity. The [Farm Facts](#) booklet should be used as the resource for this game.

Students may play the game individually, in pairs or as two teams. Provide each student, pair, or team of students with a computer that allows access to the "Ag Overload" program (web or CD). There are two parts to the game -- quiz questions and two bonus round questions. Five questions are asked and then a bonus question, five more questions are asked and then a final bonus question. (All

the questions are random from a database of 150 questions. If you are playing this game from the web, questions will be periodically updated.) Points are totaled from the quiz and bonus rounds. The following instructions are read aloud to students when they launch the program:

"Welcome to Ag Overload! Agriculture is part of each of our lives, from the food we eat, to the clothes we wear. Check out some rare and fun facts about this amazing topic as you progress through this activity. In this activity, you are to choose the correct answer to each question or fact that appears. You can get help from the HINT BUTTON, but beware, you lose points by using it. After every 5 questions you will have a chance to play a BONUS ROUND. In the Bonus Round it is your job to control a noxious weed that is threatening to choke out a new crop. To do this, you have to choose the correct answer to a challenging question. Be prepared to save this crop with knowledge!"

Ask each team to play three games and complete the **Ag Overload Score Card** for each round. Did their score improve each game? What is at least one new fact they learned? Ask each individual or team to total all three rounds for a final score. Which team in the class did the best?

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