

# TECH: Career Trek (Ag)

## Summary

Students will explore careers in agriculture and natural resource fields through online research; students will check their understanding through a board game.

## Time Frame

2 class periods of 45 minutes each

## Group Size

Large Groups

## Life Skills

Thinking & Reasoning, Communication, Employability

## Materials

### *Activity 1*

Holland's Interest Assessment and Hexagon Graph Worksheet for each student (attached)  
Copies of the "Responses to the Career Assessment" and worksheets A and B or the ability to project these pages  
Internet access to view the "What's been your agriculture experience today?" PowerPoint (see Links section)

### *Activity 2*

Access to Internet to view agricultural and natural resources career videos

### *Evaluation*

Career Trek game board, one for every four students (see Links section)

## Background for Teachers

Considering a career in agriculture and natural resources? Can you name ten careers in agriculture and natural resources? Careers in agriculture and natural resources provide people with the things they use everyday: food, clothing, and shelter. Farmers and ranchers--who work with a multitude of scientists, technicians, business people and educators--all get involved to provide safe, inexpensive food from the farm to our fork. Researchers and scientists help to develop new seeds, safer crop protection, and more efficient machines that are part of a large complex system that provides us with the things we use everyday. Opportunities have expanded in the field of agriculture to include unique positions in sustainable farm management systems, biotechnology, forestry, marketing, engineering and more.

Employment opportunities for U.S. college graduates with expertise in the food, agricultural, and natural resources system are expected to remain strong during the next five years, according to "Employment Opportunities for College Graduates in the U.S. Food, Agricultural, and Natural Resources System," the 7th five-year employment opportunities projections study initiated by the National Institute of Food and Agriculture (NIFA). The study identified graduates with baccalaureate or higher degrees in agriculture, natural resources, veterinary medicine, or closely allied specializations. This study (see link on materials list) examined those graduates who qualify for and generally enter scientific and professional occupations within the broadly defined careers of the food and agricultural sciences.

This year's study identified 54,400 annual job openings for new graduates from 2010 through 2015. To fill these openings, an average of 29,300 graduates is expected annually from colleges of agriculture and life sciences, forestry and natural resources, and veterinary medicine. In addition, approximately 24,200 qualified graduates each year from allied fields, including biological sciences, engineering, health sciences, business, and communication will compete for these positions. Four major factors will define the market for graduates in the next five years: macroeconomic conditions and retirements; consumer preferences for nutritious and safe foods; food, energy, and environment public policy choices; and global market shifts in population, income, food, and energy. Some of the future careers in agriculture are yet to be defined; they are the emerging careers in agriculture.

Most people want to spend their work time doing something they enjoy. Many people have a hard time deciding what type of job they would enjoy. The Holland Theory is a way to evaluate what types of activities you enjoy or interests you have and match these to the jobs you might enjoy. By answering a few questions, students may find out which agricultural and natural resource careers might match their talents and capabilities.

People usually enjoy working in environments that allow them to associate with like-minded individuals. There are six different types of working environments: realistic, investigative, artistic, enterprising, social, and conventional. Many people are a combination of types and may consider working in careers that combine two or more types.

Today there are 365 fields of study and employment in agriculture. Take the time to explore some of the careers awaiting you. Refer to the Links section for more resources.

### Instructional Procedures

#### *Activity 1--Interest Assessment*

Provide each student with a "Career Assessment" and Hexagon Graph worksheet. Ask students to answer the questions on the "Career Assessment" worksheet.

Project the "Responses to the Career Assessment" page. Go through the Responses to the Career Assessment. Ask each student to indicate which characteristics they've chosen by making tally marks on the Hexagon Graph Worksheet.

At the conclusion of the questions, have the students add the number of tallies after each characteristic.

The students should have one or two characteristics that have more tally marks than the others. Ask them to color these areas on the Hexagon Graph Worksheet.

Hand out or project worksheets A and B; the worksheet a student is interested in depends on which characteristic had the most tally marks. These worksheets include areas of study and career possibilities that may interest persons with these characteristics.

Ask each student to choose one or more career(s) from the career possibilities list that interests him or her.

Each student should research the career he or she chose and list job responsibilities, education requirements, salary, and how it relates to production agriculture. (Most of this information can be found in the PowerPoint noted on the materials list.)

#### *Activity 2--Video Review*

Ask students to view or view together the [Prezi video presentation on agricultural careers](#), available through YouTube.com.

Knowing what they know about their interests, the education they are willing to consider, and their pay expectations, ask them to view one of the agricultural and natural resources careers videos located on YouTube and TeacherTube that is the most closely related to their career of

interest. (On each site search "Agricultural Careers." This may be downloaded as a podcast and viewed as homework.)

After the students view one of the career videos, ask them to share with the class what they viewed and something new they learned about the career. It is possible there will be multiple viewings of some movies; ask them to report as a group.

#### *Evaluation--Career Trek*

Use the "Career Trek" game to assess basic student knowledge about agricultural and natural resource careers. The game includes a list of 32 careers, but this lesson has exposed students to over 100 careers. Tell students it is permissible to mention agricultural and natural resource careers that have been discussed in class but are not on the game board (the group needs to agree that the occupation stated is an agricultural or natural resource career, like agreeing on a word in Scrabble). An occupation title can always be checked by using Google or on the FFA career website (see Links section). When all students can name at least 10 agricultural and natural resource careers, they have met the core objectives.

To further assess students, ask students to place the careers noted in the PowerPoint, in the Prezi, or on the Career Trek game into the appropriate Career Pathway category noted on the Utah Career Technical Education website,

<http://www.schools.utah.gov/cte/documents/pathways/AgPathways.pdf>.

#### Authors

[Debra Spielmaker](#)