

Incorporating Agriculture into Academia

Team Teaching- Connecting to Agriculture A 1-Day Lesson Plan

This lesson plan is designed to be team taught with the subject teacher and agriculture education instructor. The lesson will highlight agricultural careers, the courses offered by your high school agriculture education department, opportunities in the FFA, and how they all connect together.

The students in your classroom are learning about a core subject, a foreign language or an elective course that they have an interest in. The objective of this lesson is to help students connect their interest in your subject area to an agricultural career.

Supplies needed:

- An Agricultural Career For You booklet for each student
- Incorporating Agriculture into Academia handout for your subject area for each student
- Information about the local agriculture education program and FFA chapter

Introduction:

When am I ever going to use this? Students often ask this question when they are in class or doing homework. Making the connection between your subject area and agriculture will be accomplished in this lesson.

1. **Subject Teacher**- Ask the students how they plan to use the information, skills or background they are learning in your class in a career or future job? Some questions to ask...
 - How will you use math in your job?
 - What writing skills will you need in various types of jobs?
 - What jobs will use Spanish, German, French or other languages?
 - How will the ability to relate to people be important in your career?
 - What accounting or business skills will you need in various jobs?
 - How will you use computers and technology in a job?
 - What skills do you need to find a job without additional education?
2. **Agriculture Teacher**- Ask the students how your subject area might relate to agriculture?
3. **Agriculture Teacher**- Pass out the booklet- An Agricultural Career for You
 - a. There are seven career pathways in agriculture. Each pathway has a page in the career booklet with a listing of careers relating to the pathway. As you page through the pathways, have them review the various occupations listed for that pathway.
 - i. Plant Systems
 - ii. Animal Systems
 - iii. Power Structural & Technical Systems
 - iv. Natural Resources Systems

- v. Environmental Service Systems
- vi. Agribusiness Systems
- vii. Food Products & Processing Systems

- b. Have them open the booklet up to the middle section where the mirror and all the different careers are listed. Have them circle all of the careers that relate to your subject area or that they may have an interest in. Have the students brainstorm all the different ways your subject area would be used in the careers that they circled.

4. **Agriculture Teacher**- Refer to the student handout for your subject area

- a. Ask how many students are from a farm? How many have family members that are involved in agriculture? How many take an agricultural education class in your high school (if offered)? Read- ***But I'm not from a Farm*** with the class.
- b. Review these statistics with students that are from the 2005-2010 Employment Opportunities for College Graduates in the U.S. Food, Agricultural and Natural Resources System:
 - i. The USDA predicts there will be 52,000 annual job openings for new graduates during 2005-2010 with some 49,300 qualified graduates available each year.
 - ii. Annually, an average of 32,300 new graduates from U.S. colleges of agriculture and life sciences, forestry, and veterinary medicine are expected to take jobs in the system. Other job openings will be filled by 17,000 qualified graduates from allied higher education programs such as biological sciences, engineering, business, health sciences, communication, and applied technologies.
 - iii. Four major factors will define the market for graduates during 2005-2010
 - 1. Consumers and their preferences
 - 2. Evolving business structure in the U.S. food system
 - 3. New developments in science and technology
 - 4. Public policy choices and food system security
 - iv. Bottom line- we need more qualified graduates and employees going into agricultural careers!

According to University of Wisconsin-Extension, "Wisconsin and the Agricultural Economy", Wisconsin agriculture provides almost 420,000 jobs, which is 12% of the state's workforce. Every new job in agriculture generates an additional 1.3 jobs in Wisconsin.

Agriculture is a \$51 billion industry in Wisconsin and one of our largest industries! As the industry constantly changes, we are looking for workers for jobs that haven't even been developed yet!

- c. **Both teachers**- Read the feature articles as a group or break into two groups and each take a person. Discussion questions can include:
 - i. What does that person do for a living?
 - ii. How did your class subject have an influence on the person?

- iii. Did the person have any recommendations on what they would have taken for classes, studied more, or done differently when in school?
- iv. How does the person use the skills, information, or technology learned in your subject area in their job?
- v. Are there people in your area that have similar jobs or careers?
- vi. Do your students know of anyone that works in a similar field?
- vii. What impressed you most about this person or the information shared?
- viii. What was the person's key message to you?

d. Review - ***What classes should I take***

- i. **Subject Teacher**- What core courses does your middle and high school offer that relate to those listed?
- ii. **Agriculture Teacher**- What courses does your school's agriculture education department offer to help students learn more about specific interests or areas? Review the courses offered in your school, course requirements and pre-requisites.

5. **Agriculture Teacher**- What does the FFA have to offer in this subject area? Discuss Career Development Events, Supervised Agricultural Experience Programs, and other contests that relate to the career area. What other conferences and activities does your program offer?

6. Additional activities, homework or independent study ideas:

- a. In "An Agricultural Career for You" booklet
 - i. Complete the page on "Identifying Careers"
 - ii. Complete the page on "A Career Adds Up"
- b. Have the students visit some of the university or technical college websites to learn more about programs or majors they might be interested in.
- c. Have the students make a presentation (i.e. poster, 3 minute speech, or small group sharing) about a career they are interested in, what education they will need, the high school classes that will be helpful, and what they will do in that job.