



# Maine Agriculture in the Classroom Lesson

## Exploring Agriculture

Grade 9 – 12

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**PURPOSE:** Students will show an increased awareness and knowledge of agriculture and agricultural careers and the effects agriculture has on the economy. Pathways to potential careers that students have a personal interest in are identified and researched.

### OBJECTIVES:

1. Students will learn to work as a team and host the Amazing Ag Expo.
2. Students will interview and evaluate notes to determine personal interest areas.
3. Students will identify three possible follow-up contacts for in-depth study.
4. Students will contact, and conduct internships and/or research, individually or in small groups, covering one area that they have a particular interest in.
5. Students will submit presentations, and in some cases written research papers, to their peers, teachers or community members.

### PROCEDURE:

1. Activate Prior Knowledge
  - a. Students visit local farms and/ or meet farmers in classroom presentations to see first-hand the breadth of agricultural endeavors in the area and to meet the farmers in an interactive setting.
  - b. Students conduct research using the Living Science series from USDA and Purdue University and internet sources including Agro-World, Teen Scene and other Agriculture in the Classroom web resources.
  - c. Students evaluate sources of information and source credibility.
2. Action Assignment
  - a. Plan the Amazing Ag Expo – Students work as a team(s) to identify agricultural careers and locate 25 - 30 representatives to present at the Expo. They can plan a local foods lunch, sourcing each item to the farm of origin including the processing pathways involved. The event can be held at the school or another site if bussing issues are overcome.
  - b. Students identify invited guests by finding other classes studying careers, other interested schools, and/or inviting the entire school body.
  - c. Students develop individually 4 questions that they will ask each exhibitor they interview after class discussion of the components of a productive interview. They may use role playing to practice interview skills.
  - d. Students attend the Amazing Ag Expo and interview 10+ exhibitors, taking notes that they can later compare.
3. Research Assignment
  - a. Following the Expo students evaluate their notes and previous research considering the speaker's point of view, reasoning and use of evidence and rhetoric to choose 3 areas they are personally interested in continued study.
  - b. The instructor approves all groups and content choices for projects.
  - c. Individually or in small groups, students contact representatives and arrange in-depth study of one particular career, commodity, farm or historical event.
  - d. Students complete research (\* If applicable the student and instructor identify credit recovery requirements and plan accordingly)

### SUBJECTS

English Language Arts,  
Social Studies, Economics,  
Career Education, Science

### BRIEF DESCRIPTION

In this Project Based Learning Exercise students will learn what types of agriculture are present in their area, how they affect the food and fiber system, and what economic influence they have on their daily lives. They will also research agricultural careers.

### MATERIALS

Student Journal, laptop or other technological instruments for student presentations.

### EST. TEACHING TIME

The entire lesson is designed for one class block for an entire semester. Amazing Ag Expo takes several weeks to plan and one full school day to execute. Research will cover several weeks of in-class and outside time. Presentations are 5 - 10 minutes per student or in a science fair format.

### VOCABULARY

Agronomy  
Agri-tourism  
Local Economy  
Sustainability  
Barriers  
Other project-specific

This lesson may be used in its entirety or components may be used separately.

- e. Students present to peers, groups of teachers and/or community members the results of their research using the technology of their choice.
- f. Students will hear at least two peer presentations and will evaluate effectiveness, source credibility, presentation format, details, reasoning and other components of the presentation.

**ASSESSMENT:** The students' final project will answer the following 5 questions using their research:

1. What is the economic impact of the farm and/or career you researched?
2. What barriers exist for the farmer or individual regarding sustainability of this farm or career into the future?
3. What primary and secondary job opportunities did you find through your research?
4. What are the educational and experience requirements for the primary jobs you witnessed?
5. How do you feel agriculture impacts your life through the career you researched?

## **STANDARDS:**

### **Common Core Standards**

English Language Arts Speaking & Listening: SL.9-10.1, SL.11.12.1.

Writing: W.9-10.2, W.9-10.4, W.9-10.7, W.11-12.2, W.11-12.4, W.11-12.7

1. Integrate multiple sources of information presented in diverse media or formats evaluating the credibility and accuracy of each source.
2. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric
4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear prose
5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (Grade 6 – 8 standard)
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

### **Maine Learning Results**

#### **Career and Education Development Standards**

1. Students examine sources of information that influence their career and education decision- making.
2. Students analyze and evaluate strategies for addressing diverse and changing societal and global economic needs that influence personal decision- making for workplace success

### **EXTENSIONS:**

1. Students may research post-secondary schools where a person preparing for these careers would attend and identify submission requirements, or even prepare applications.
2. \* Students have the opportunity utilize the new credit recovery program at our high school. For example English Language Arts or History requirements that students may need can be incorporated into their research to satisfy graduation requirements for upperclassmen.
3. Students at our school participate in the Maine Ag in the Classroom "Read ME Agriculture" program in March annually. MAITC provides books and materials for each class in grades PK – 4 that participates. The high school students read to younger students in the district and then share the knowledge of agriculture they have gained through their research projects.
4. Students may visit a 2 or 4 year college to talk to career professionals about careers in agriculture.

### **RESOURCES:**

1. Local Farmers – Listings include the Maine Ag in the Classroom Teacher Resource Guide at [www.MaineAgintheClassroom.org](http://www.MaineAgintheClassroom.org) or Maine Dept. of Agriculture at [www.getrealmaine.org](http://www.getrealmaine.org)
2. USDA Purdue Living Science Career Packet - <http://www.agriculture.purdue.edu/usda/careers/>
3. University of Maine Cooperative Extension - <http://extension.umaine.edu/>
4. Maine Association of Conservation Districts - <http://maineconservationdistricts.com/>
5. Individual State, Regional or National Commodity and/or educational groups