

Alyssa Macri AITC 2011

Agriculture in the Classroom Lesson 1

Lesson Title: Problematic Pesticides? A Debate

Audience: Distance Education HS Grades 11, 12

Duration: Approximately seven 40 minute class periods

- Days 1-3: Prepare for online debate
- Days 4-5: Debate
- Day 6-7 (if needed): Final Discussions and wrap-up

Objectives: By the end of this lesson, students will be able to do the following:

- Conduct research on various forms of pesticides found in their local area using basic internet search tools.
- Prepare arguments with factual information for and against pesticide use based on research.
- Participate in an organized debate and formulate appropriate reasoning in defense of a particular position on the issue.
- Collaborate with peers via live chat with teacher to discuss reactions to debate.

Standards:

Geography 7.4.12.B.2.

Environment and Ecology 4.3.12.A.4., 4.4.12.A.3, 4.4.12.B.2., 4.6.12.A.1.

Reading, Writing, Speaking and Listening 1.2.11A.2, 1.4.11.B, D, 1.5.11., 1.6.11., 1.8.11.

Science and Technology 3.2.12.D.5

Materials: Access to internet, newspapers, magazines and other reference materials at students' homes, notepads to take notes (optional), access to a word processing program.

Anticipatory Set: Students will enter into the course discussion board to find the following scenario posted: "The local newspaper in your area has shocking news! A local farmer has discovered a new and innovative way to increase food production for his entire community and towns beyond. A new strain of pesticide has been made available and it will ensure better quality crops and the farmer will be saving a great deal of money on production costs which will lead to cheaper prices for consumers. "It's like the

miracle product of the century,” explains Farmer Ben Smith, adding “There are minor detrimental effects to the environment, but I am sure that they can be solved over time.” Students will be instructed to post a short discussion on anything they currently know about pesticides and their reaction to this article.

Procedure:

- A homework assignment post will be presented for students to research pesticide use in their local area (since this is an international course, it should be expected that we will get a wide range of areas). Students should note how they are used, pros and cons of their uses and what could be done instead to enhance crop production through the absence of pesticides. They will then submit their findings to an appropriate discussion board.
- At random, students will be split into two groups, one for the use of pesticides and one against. Students will communicate with their team members via email and, when appropriate (due to time differences), live chat rooms that will be set up by the instructor beforehand.
- Teams will select two people to act as spokespersons for their groups’ findings. A time and date several days later will be set up for these selected students to meet (that is acceptable for all time zones). The meeting will be recorded and will be sent to the remaining students so that they may hear the debate. The room will be a 40 minute allowed time frame where the instructor will be present to open and close the proceedings.

Closing: A final discussion board/chat room combination will be initiated for students to share their reactions and final thoughts on this issue. They will also be encouraged to share their ideas for how pesticide use could be either eliminated and/or reduced overall. Students are required to post a final discussion or take part in the chat room (again, this will depend on the time zone and availability of the student).

Evaluation: Students will be graded using a teacher created rubric (see following page).

Debate Rubric

Name: _____ Date: _____ Period: _____

Subject of Debate: _____

Criteria	Rate: 1-10	Comments
Participation in all activities by student		
Opening statements were well organized.		
Team members addressed remarks to the audience.		
Opening statements were not read from cards.		
Both team members participated equally in opening statement.		
Students spoke loud enough to be heard.		
Rebuttal was specific to arguments made in the opposing team's opening statement.		
Both team members participated equally in the rebuttal.		
Answers to audience questions were well thought out.		
Respect was shown throughout the debate for the opposing team. (No name calling, interruptions, etc.)		

Points Earned: _____/100

Source: <http://7-12educators.about.com>