

Lesson Plan 1
The Meatrix: Do You Want the Truth?
Factory Farm vs. Family Farm

Name: Melissa Bannister

Grade: Middle School

Subjects: Reading, Writing, Social Studies,
Technology, Math, Art

Time: 2 sessions @ 50 minutes

PURPOSE: The purpose of this lesson is to inform students of the differences between factory farming and sustainable farms while incorporating math computation techniques and the use of graphs and tables.

OBJECTIVES:

1. As a group, students will research online, in the library and use other sources to collect ten facts and/or opinions and at least 3 statistics (including percentages) regarding family farms and factory farms.
2. As a group, students will separate facts and opinions from the researched information and make a small poster (11 x 17) depicting each and include at least one major statistic.

PRE-ASSESSMENT: Students have worked with resources and computers and are aware of how to search the web, library and other resources in order to gain substantial information on a subject. Students are familiar in the making of posters for display.

SET INDUCTION: Explain to the students that this lesson is the introduction to the Meatrix Unit. Tell the students that in this lesson they will be viewing a video of “The Meatrix” as well as exploring the history of family farms. They will gather research on both topics with an emphasis on statistics and percentages.

PROCEDURE:

1. Open the lesson with the question, “What did you have for dinner last night?” Allow responses. Ask the students a series of questions such as: Where did the food come from? Where did the store get the food?, etc.
2. Give an introduction to the mini movie “The Meatrix”. Explain the correlation between the Meatrix and The Matrix. Have students tell what they remember about the movie “The Matrix”, its characters, and general theme. Intro some of the characters in “The Meatrix” and parallel the likenesses.
3. View “The Meatrix”.

4. Post a KWL list on the wall for use during the unit. The title should be “Factory Farms vs. Family Farms.” (K = what you know, W = what you want to know, L = what you have learned.) Fill out the K and W portions.
5. Allow the students to have computer lab time to go and research factory and family farms and find out as much information as they can. Some websites the teacher can post to get the students started are:
 - Factoryfarming.com
 - Factoryfarm.org
 - Sierraclub.org
 - nffc.net
 - familyfarmdefenders.com
6. While performing research, students should create a log and keep notes on the information they have found. Prompt students to keep in mind the KWL chart. The goal for each team is to find 10 facts or opinions regarding either type of farming and three of those should include some type of numerical statistic.
7. Once all the information has been gathered, teams should discuss what they have found and create a poster that contains the requirement stated in the objective.
8. The groups should then take the information they retrieved and fill in the rest of the KWL chart for the whole class to review.

CLOSURE:

Allow students to present their posters and display them in the classroom or hallway. Tell the students that this is only the beginning to what they will learn over the next few weeks while working on this unit of *The Matrix: Do You Want the Truth?*

MATERIALS NEEDED: Computer lab, library, list of websites, research graphic organizer, poster paper, markers, glue, etc.

EVALUATION:

1. As a group, student’s research will be assessed for ten major facts and/or opinions and three statistics and/or percentages.
2. As a group, student’s poster will be assessed for properly listing facts and opinions and for the one statistic and/or percentage.

CITATION: original work.

Lesson Plan 2
The Meatrix: Do You Want the Truth?
Additives

Name: Melissa Bannister
Subjects: Reading, Writing, Social Studies,
Technology, Math, Speaking

Grade: Middle School
Time: 6+ sessions @ 50 minutes

PURPOSE: The purpose of this lesson is to inform students of the positives and negatives of the use of antibiotics and hormones in meat and dairy production. This information will be collected and sorted to enable the students to have a class debate. The lesson will strengthen students' hands on interview skills and will help students gain valuable information through personal interaction. Finally, this lesson will also build on debate, research and listening skills.

OBJECTIVES:

1. As a group, students will research farms and interview farmers regarding the positives and negatives of using additives in meat and dairy production to collect five or more facts for a cause & effect poster to be used as a visual aide in their debate.
2. As a group, students will debate the pros and cons of additives used in meat and dairy production and meet the requirements located in the debate format.

PRE-ASSESSMENT: Students are familiar with the debate format. Specific rules have been addressed and are in writing as well as the debate format. (See attached) Students typically have no problem adhering to the rules as in most classes the debate format is fun and engages the student to full capacity. (Note: Due to the six day format of this lesson, it is usually good to start on a Thursday or Friday so that the debate can happen directly after preparation.)

SET INDUCTION: Explain to the students that this lesson is regarding two sides of an issue. The class will be divided into two sections and be expected to debate this issue from either side with reverence.

Day 1: Display on an overhead and read aloud the issues statements from the Sustainable Table website. Discuss.

PROCEDURE:

1. Teacher continues the lesson with the handout “Why Farmers Use Hormones” and read together.
2. Comprise a general list of several factors on the board for each side noting at least one plus and one minus.
3. Teacher then makes a different list consisting of the roles the teams should play when divided. (Facilitator, recorders, reporters, and researchers). Note that debate roles will/can be different than the group work roles.
4. Teacher provides a formal review of the debate overview and format.
5. Divide the class into two sections. Dividing the class can be tailored to the teachers liking. Teacher can flip a coin to determine side, draw names or ask for volunteers. Immediately divide the classroom seats (if able) into two circles or long rectangles so each group has their own area.
6. Teacher should circulate the room and guide or answer questions as needed while students begin their research. Students should also begin formulating questions for the farmers.

Suggested websites: <http://animalrangeextension.montana.edu>; www.mercola.com;
<http://communityhealthgate.com>

DAY 2: Students may conduct phone interviews with family farmers and factory farmers from a list of contacts approved by the teacher. (The teacher can get these contacts from her local FFA branch or personal knowledge.) The intended list of questions must be preapproved by the teacher and at least two students must partake in each interview. Teachers can also arrange for farmers to visit the classroom.

Day 3: Students should continue researching and sorting the information they have received.

DAY 4: Students should be broken down into smaller groups; some start formulating key points for the debate, choosing speakers, others start putting together the visual aide, while the rest may be finalizing research.

Day 5: Practice day. Both sides perform a dry run of their debate. Students within the group should play devils advocate in order to prepare for any/all rebuttals from the opposing side.

Day 6: Debate Day. Teacher should call in a jury or panel of judges. Jury or judges will be given a score sheet, debate overview and debate format. Judges and/or jury can be other teacher, staff, parents, or students from other classes.

CLOSURE:

- Allow students to post their debate cards by their visual aide and hang in the hall.

MATERIALS NEEDED: Computer lab, library, list of websites, research graphic organizer, poster paper, markers, glue, debate overview sheet, debate format sheet, and attachments.

EVALUATION:

1. As a group, student's research will be assessed for five or more additive facts obtained from personal interviews from farmers.
2. As a group, student's debate will be evaluated for meeting all of the requirements listed on the debate format.

CITATION: sustainable table issues samples, The Weston Price Foundation "why farmers use hormones, debate – original work.

Lesson Plan 3
The Meatrix: Do You Want the Truth?
Nutrition Awareness

Name: Melissa Bannister **Grade:** Middle School
Subjects: Science, Math, Technology, Language Arts **Time:** 4 sessions @ 50 minutes

PURPOSE: The purpose of this lesson is to inform students they are what they eat. That the food we all consume is not as wholesome and healthy as you may think. This lesson should educate students on the benefits and harmfulness of everyday food and will show the possible effects of constant consumption of poor foods. This lesson will also give students a resource to be used as a possible guide for healthy eating.

OBJECTIVES:

1. Individually, students will make a list of common foods they eat on a weekly basis, use scientific method to predict the grams of fat in each item and research at <http://www.caloriescount.org/> for a complete list of calories and fats for an actual count.
2. Individually, students will compare and contrast the two lists and create a graph that displays their predictions and the actual numbers accompanied by writing a paragraph with supporting details.
3. Individually, students will write a paper that answers the question 'I will change/should change/won't change my eating habits and why.'

PRE-ASSESSMENT: Students are familiar with calories, fats, sodium, and sugars in food. Students are familiar with internet research. Students have created a matrix in the past with a supporting paragraph.

SET INDUCTION: DAY ONE and TWO: Explain to the students that this lesson is another shock and awe lesson that informs them of the potential hazards of eating poorly on a consistent basis. Watch the movie "Super Size Me" to give kids a base of knowledge that the foods they are eating may be hurting them. Discuss America's common favorite foods, make a list on scroll paper. Guide

students into the fast food world as well, including those foods on the list. Leave a space to note the fat and calorie count.

PROCEDURE:

DAY 3:

1. Teacher then tells students to make their own personal list of favorite foods, leaving space at the end of a page for a five column matrix. (fat prediction, serving size, fats, calories, and approved)
2. Prompt the students to use the scientific method to predict the number of grams of fat that is in each of their favorite foods.
3. After students have completed their lists and their predictions of fat grams, they then can move on to the internet research at <http://www.caloriescount.org/> At this site, students should click on "enter the calculator" and then simply type in their favorite food from the list and click submit. The calorie counter will give a serving size, grams of fat and total calories. This should be logged into the matrix.
4. The 'approved' site should be a blank column. To fill this in, girls should select foods that total 40 grams of fat and boys should select foods that total 53 grams of fat. This represents the estimated daily average fat intake in a normal healthy diet. Total predictions, real fat numbers, and percentages of the differences were off.

DAY 4:

1. Teacher should introduce the new food pyramid and guide students to the web site <http://www.mypyramid.gov/>
2. At this site students can put in age, sex, and exercise level and click submit to gain their own food pyramid information for a healthy diet. Students can click on the PDF version and print out their own pyramid poster keep with them and a meal tracker worksheet to track food habits and compare and contrast them to their food pyramid. Allow students to discuss their pyramids and assign homework to complete the meal tracker for one complete day (to be handed in two days for assigned date).

CLOSURE: Prompt students to write a paper about if they will/should/won't change their eating habits. Students should include supporting details and evidence learned in class and research.

MATERIALS NEEDED: Computer lab, calorie/fat counter books, list of websites, research graphic organizer (if teacher wants to create matrix for handout).

EVALUATION:

1. Individually, student's calorie/fat lists will be evaluated for completion and accuracy.

'schools' should be read for valuable information. (An alternative school turned to healthy eating and behavior improved and grades went up.)

2. Given the information they have learned in the unit, prompt students to research buying local organic food in their community. Find out if it is accessible, affordable and a possible alternative for them and the community. Find out if there is a farmers market, what they sell, and the hours.
3. **Day Three** Inform the students it is now their turn to advertise. Students should pull the most valuable of information from all the lessons in this unit onto one paper. These items should be worthy, hard-hitting, attention getting item that will want to make the reader keep reading and learn more. Teacher should review a brochure/flyer layout: problem, stats, positives, negatives, alternatives.
4. Students should take this information and begin mapping out the format for their flyer or brochure.
5. **Day Four:** Students should begin work on their flyer.

CLOSURE: Students should present their flyer to the class. Class then should vote on four flyers to have reproduced to hand out to family and friends. Make copies and distribute.

MATERIALS NEEDED: Computer lab, ad slogan examples.

EVALUATION:

5. Individually, student's flyers/brochures will be evaluated for facts, details, and alternatives/solutions to the issues to included evidence learned from the unit.

CITATION: "Super Size Me" for set induction, the rest original work.