



The Facts of Life: More than Birds and Bees

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Overall Goal: participants will recognize the depth and breadth of U.S. and Michigan agriculture.

OBJECTIVES:

1. Students will interpret key facts and statistics through interactive activities.
2. Students will design activities to teach others about agriculture statistics.

EDUCATIONAL STANDARDS:

Common Core English Language Standards-LITERACY RST.9-10.2; RST.11-12.2, SLS.9-10.4; SLS.11-12.4

Common Career Technical Core: AG1.2; AG1.5; AG 1.6; AG 2.2; AG 2.3; AG 2.4

Common Career Technical Core Career Ready Practices: 01.IA.04; 01.IA.05; 01.IA. 06; 01.IA.12

CONNECTION:

Where does Michigan Fit?

1. Split students into teams and have them select a team name.
 - a. Create a score board with the team names on a whiteboard or tear-sheet
2. Go through trivia questions and keep score of the points each team collects.
 - a. Have students answer by writing the answer on a sticky note and running it to the front of the classroom.
 - b. Remind students not to use their phones or other devices to look up the information.
3. After completing the set of questions, determine a winner.

The following questions for trivia can be placed onto PowerPoint slides or be read aloud during the activity:

1. Michigan farms are split 60% crops, 40% livestock. Overall, U.S. farms is _____ % crops and _____% livestock. (87% crops, 13% livestock)
2. The average age of a U.S. farmer is 58 years old. The average age of a Michigan farmers I _____. (56)
3. The average Michigan farm is 193 acres. The average U.S. farm is _____ acres. (437 acres).
4. The U.S. has 915 million acres of farm land. Michigan has _____ acres of farm land. (9.95 million)
5. There are 8,268 Farmers Markets in the U.S. Where does Michigan rank amongst the other states for number of markets? (3rd)
6. Through 2015, Michigan farmers participated in conservation programs through the Natural Resources Conservation Service to prevent soil erosion, runoff of sediment into waterways and preserve natural wildlife habitats on more than _____ acres. (2.3 million)
7. 25% of all Michigan's land is managed by local, state, or federal governments (think state and national parks). _____ % of all U.S. land is managed by local, state, or federal governments. (42%)
8. The U.S. exports \$150.5 billion of agricultural products annually. Michigan exports \$_____ annually. (approximately \$2.8 billion)
9. 24,795 Michigan residents claim primary farm operator as their occupation. _____ people in the U.S. claim this as their occupation. (2 million)
10. There are approximately 240 land grant higher education colleges and universities in the U.S. and its territories. Michigan has _____ land grant college or university(ies) under the Morrill Act of 1862. (1, although 3 tribal-land grant colleges have been added)

Processing Questions:

1. After thinking through those team trivia questions, how does Michigan agriculture align with the rest of the U.S.?
2. Why is this significant?
3. What are some sources you could utilize to find these and other statistics or facts?

OBJECTIVE 1: Students will interpret key facts and statistics through interactive activities.

Support: Kahoot.it Michigan Agriculture Style – students will use their own cell phones/tablets to play a round of Kahoot to dive deeper into Michigan agriculture facts.

Point: Michigan Agriculture is kind of a Big Deal – as the second most agriculturally diverse state in the nation and the state's second largest economic sector, we as agriculture have a lot to be proud of!

Application: Agriculture Elevator Speech – students will use the formula in their respective handouts to write individual elevator speeches to explain Michigan agriculture to anyone they meet.

SUPPORT:

1. Ask students to pull out their cell phones/tablets/laptops and in a browser, go to Kahoot.it.
2. Display the Kahoot.it. site on a screen/laptop for the whole room to see.
 - a. Display the game code and cue up the Kahoot game on this screen to have students start the game.
 - i. Instruct students to enter the game code and their first and last initials.
 - ii. Instruct students that a question will pop on the screen and a countdown will begin. They will then answer the question from their personal device.
 - iii. Let students know that the faster they answer questions, the more points they will receive!
 - b. Determine and announce the game winner.
3. Have students turn to page [redacted] of their handout materials and copy down their favorite facts from the Kahoot game.
 - a. Display the questions from the Kahoot game on the screen/laptop.

Processing Questions:

1. What fact surprised you the most?
2. Which do you think would surprise a lot of your chapter members/classmates?
3. Are there any that would surprise your parents?

POINT:

1. Acknowledge and discuss with students that using short, quick facts help people better understand the scope and depth of agriculture. Be sure to source your facts from a credible website; check out page [redacted] of the handout for a list of these resources!

APPLICATION:

1. Review the process of creating an elevator speech with students. Use page [redacted] of the hand out as a guide as well as a PowerPoint slide or poster of the steps as well.
 - a. Who – name, chapter/high school and organization affiliation

- b. What or Why – the main point of the conversation. One or two facts, in this case about agriculture, and that we feel are important that others know about.
 - c. How – how we are associated with the main point of the conversation; personal stories and connections or our experiences in class, on our farms, in our SAE's and more.
2. Have students create their own elevator speech and write their final version on page [redacted] of the hand out.
 3. Instruct student that they will have 5-8 minutes to complete their speeches.
 - a. Perform time checks
 4. Ask for volunteers to share their speeches.

OBJECTIVE 2

Students will design activities to teach others about agriculture statistics.

Support: Investigate Activities to Teach Lessons – students will explore methods to teach lessons about agriculture facts to their peers.

Point: Design an Activity to Teach these Facts – students will develop different activities to teach these agriculture facts to other students.

Application: Incorporate into POA – students can brainstorm ways to incorporate these lessons into the chapter's POA.

SUPPORT:

1. Ask to students to recap the activities that they have done today with ag facts; prepare them to brainstorm more activities that can help people learn agriculture facts.
2. Instruct students to take about 10 minutes to:
 - a. Brainstorm a creative activity to learn the top ten facts they recorded on page [redacted] of the hand out.
 - b. Map out the activity on page [redacted] of the hand out.
 - c. Be prepared to share and explain their activity later.

POINT:

1. Discuss with students that although facts are effective, integrating them into an activity or lesson plan makes them much more impactful and valuable.

APPLICATION:

1. Instruct students to create two lines and to face each other, standing about an arm's length away with their handout materials at the ready.
2. Inform them that they will be sharing their lesson plans with the student across from them.
 - a. Direct one half of the room to speak first, while the other half listens.
 - b. Share with students that they will only have about 30 seconds to share, so they should be concise and hit main points!
 - c. Provide a start and a switch time. Give time checks as necessary.
3. Have students wrap up their conversations and as they return to their original spaces, write down a few ways they can utilize the lessons in their chapter or classroom.

REVIEW AND CLOSE:

1. Ask students to turn to page of their handout materials and 3-5 minutes brainstorming at least three ways they can use the lessons or facts in their chapters/communities.
 - a. i.e., if some of the facts hit home, write it down to remember; if a peers' activity was really creative, write it down!
2. Wrap up with any further concluding remarks.

Today we:

- *learned where Michigan fits in the larger picture of U.S. agriculture*
- *investigated the top commodities and facts that make Michigan agriculture so important to our state*
- *created lessons we could use back in our own chapters.*

Thank you for learning the facts of life! I know your chapters will learn lots from information you bring home to them next school year.