

The 5 E's: A Model for Designing Lessons for Inquiry Planner¹

Logistics Information:

- a. Middle School Social Studies Learning Cycle
- b. Iowa Core Essential Concepts:
History: Understand cause and effect relationships and other historical thinking skills in order to interpret events and issues
- c. A synthesis of *Project WILD* and 8th Grade American History
- d. Developed April 17, 2010

Background Information: Students will have been taught cause and effect relationships throughout the year.

Materials Required:

Writing and drawing materials

Time Period:

One forty-five minute session

Name of the Unit of Instruction: What Did Your Lunch Cost Wildlife?

- I. Plan of the Unit
 - a. Goals of the unit: 1. Understand cause and effect relationships between the food humans choose to eat and the effect it has on wildlife and the environment.
 - b. How this unit relates to the curriculum:

| Previous Grade/Course | Current Grade/Course | Next Grade/Course |
|---------------------------------|--|---|
| 7 th Grade Geography | 8 th Grade American History: Cause and Effect Relationships...Iowa Core | 9 th Grade American History: Civil War to Contemporary |

- c. Lesson Plan: Phases in a 5E Learning Cycle: Engage, Explore, Explain, Elaborate, and Evaluate.

¹ Adapted from *Teacher to Teacher: Reshaping Instruction Through Lesson Study* (NCREL, 2002)

| Phases of the lesson: learning activities and key questions (and time allocation) | Student activities/ anticipated student reactions or responses | Teacher’s response to student reactions/ Things to remember | Evidence of Student Understanding |
|--|---|---|--|
| <p>ENGAGE (Introduction, Anticipatory Set): Ask students what they had for lunch.</p> <p>EXPLORE (Activity, Investigation): Students will pick one food to trace all the way back to it’s origin. They must also consider the package included with the food if applicable. Students will create flow charts following the steps of the food from origin to when it was devoured.</p> <p>EXPLAIN (Closure): Ask students what changes they would make to foods they choose to eat and how the changes would positively impact the environment. Draw on cause and effect relationships.</p> <p>ELABORATE (Connections and Applications): We will discuss what cause and effect relationships mean. Students will list examples of other cause and effect relationships we have learned about.</p> | <p>Students will give examples of things they ate at lunch that day or the day prior depending on the time of the class.</p> <p>Anticipate that many students will not realize that their food did include a package at some point even if the food not given to them in a package. Example: Hot dog given to them was once in a package with 11 other hotdogs and those packages were once boxed together with numerous other packages.</p> <p>Students will consider the environment when making food choices because they will have a better understanding of cause and effect relationships</p> <p>Students will mention effects of Europeans arriving in America, events leading to the Revolutionary War...etc.</p> | <p>Don’t tell students why you are interested in what they had for lunch quite yet.</p> <p>Prompt students to hit every step of the way from origin to food.</p> <p>Encourage students to consider the environment when making food choices.</p> <p>Remind students that understanding cause and effect relationships is an essential lifelong skill.</p> | <p>Examination of student flow charts.</p> |

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|--|---|---|--|
| EVALUATE: This will be a common formative assessment to see the development of students' understanding on cause and effect relationships. | | Compare responses to this common formative assessment to earlier responses from students on cause and effect relationships. | |

EXTENSIONS

Factor in the financial costs of transporting and preparing the food before it is consumed.

Distinguish between renewable and non-renewable resources.

Students could do these projects collaboratively.