4B – Cultural Change (Focus on Invention) MCCC SS060403, SS060404, and SS060405a

6th Grade Social Studies Network – 2015-6 Part B of Unit 4 – Cultural Geography

GLCEs: 6G222 technology change; 6G411 and 3 cultures and cultural change; 6G441 conflict and cooperation among cultural groups; 6G512 and 521 changing technology and environment

- **1. Review**: three key definitions: *culture* (e.g., of the pioneers); *culture shock; cultural adaptation* US5 Culture of the Pioneers (What's in Your Wagon?)
- 2. Activity: Geographic effects of changing technology. Setup: How do you cut something? Broken bone, sharp rock, bronze knife, steel knife, laser, etc. This activity looks at historic changes in iron/steel technology, and especially at two major (you could say revolutionary) inventions that radically changed the list of desirable places for factories that made iron and a wide variety of iron products. The result in each case was an economic boom and rapid population growth in some regions and real hardship in other regions that lost jobs. The extension activity 4 shows how these principles apply to many other inventions. 6th 4B Iron Factory Location activity (+ teacher notes) 8I9 Europe clickable miniAtlas
- **3.** Scaffolding Activity: The "subcontinent" of Europe has more miles of coastline and more separate mountain ranges than Africa, Australia, and South America put together. In a complex environment, any innovation is likely to change the relative value of places. It may make some existing places more desirable, and may even make some previously unoccupied places acceptable or even preferable. Through history, a number of inventions have led to shifts in the balance of power between different regions in Europe. This geographic idea is a useful foundation for future classes dealing with European history and Europe's role in world history.

6th 4Bx Closets of Europe – Continent of Peninsulas BI9 Eu

BI9 Europe Big Idea Presentation

4. Extension Activity: geographic effect of other inventions – agriculture, galley ships, concrete, Viking dragon ships, gunpowder, compasses and chronometers, steam engines, air conditioners, cellphones, wind turbines, etc. The principles explored in the iron lesson can be applied to many other cultural innovations. 6th 4Bx Geography of Inventions

http://mentalfloss.com/article/56754/every-countrys-highest-valued-export

Pages from MCCC

- **SuppMaterials.SS060403** and **SS060403.Powerpoint**. Great graphic organizer and word cards. These actually fit the Europe innovation story better than the Mongolia case study in MCCC. Note that the Mongolia case study, while interesting, does not directly meet the new 6th grade GLCEs (see note below). The MCCC reading about culture as the engine of human adaptation (pages 4-5) is superb background, but its readability measures are all above Grade 11.
- **SuppMaterials.SS060404** has some striking images, but to interpret them students may need a <u>lot</u> of scaffold-work with simpler images and more intuitively obvious adaptations to environments.
- **Takehome**: Inventions can be viewed as new cultural ideas. People often make inventions to help them live in their place more efficiently or comfortably. Any major invention, however, can change the relative value of places. Innovation can make some places more suitable than they were before; it can even make some formerly uninhabited places desirable. At the same time, it can hurt places that have conditions that seem less desirable to people when they have the new invention.

Note: Confusion can arise because terms like "culture" and "adaptation" are often used in a rather loose way. In some lessons, adaptation is viewed as a process of fitting a culture to the conditions in a place; in others, the term is used to describe a process of changing a culture to meet new conditions; in still others, it denotes a process of changing the environment. The idea about inventiveness as a way to develop material objects that fit local conditions better can actually be used as a "lens" to look at the Mongolia case study in MCCC – look at the animal-skin house, horse equipment, bow and arrow, and other aspects of the visible culture as the result of people inventing ways to cope with a resource-poor high grassland with a rather extreme climate. Teachers who are more familiar with another "different" culture, however, are encouraged to substitute in order to make the same point – cultural rules must fit local conditions, or people have to figure out ways to change either the conditions or their rules about how to behave. Human inventions, however, can have consequences that change the relative value of places.