# Lesson Plan #4: Early American Engineers: Robert Fulton and Robert Livingston

## **Objectives:**

Students will be able to:

- Utilize prediction strategies to summarize the Robert Fulton article "Robert Fulton, Genius Ahead of His Time" by Cynthia Owen Smith **and/or** "Robert R. Livingston, Enthusiastic Inventor, Prudent Entrepreneur".
- Collaborate with team members to determine the historical impact of Robert Fulton.
- Re-read and clarify the predictions made earlier in the lesson.
- Write a short biography of Robert Fulton by focusing on 3 symbols that best represent his life and explain why they represent his life.

#### **Standards:**

# Social Studies Standard 1: History of the United States and New York

**Key Idea 3:** Study about the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals and groups.

**Performance Indicator:** Study about the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals.

**Performance Indicator:** Gather and organize information about the important achievements and contributions of individuals and groups living in New York State and the United States.

#### **Teacher Resources:**

- The Hudson River Valley Review articles:
  - o "Robert Fulton, Genius Ahead of His Time," by Cynthia Owen Philip
  - o "Robert R. Livingston Enthusiastic Inventor, Prudent Entrepreneur," by Cynthia Owen Philip

#### **Materials:**

- Hudson River Valley Review Article
- "Concept Splash" Word Bank
- Index Cards
- Chalkboard and Chalk or Large Poster Size Sheet of Paper and Marker for each group
- Paper
- Pencil/Pen

# **OPTION I ("Robert Fulton, Genius Ahead of His Time"):**

#### **Procedures:**

1. Put one word from the "Concept Splash" Word Bank (below) on each of the index cards.

indenture Robert Owen apprenticed **Fuclid** banker refuge American Revolution Charles Wilson Peale London steamboat *Clermont* oil portrait loner engineering Royal Academy canal Society of Arts, Commerce, and Manufacturing inventor Chancellor Robert Livingston Philadelphia John Barker Church lectures submarine warfare rope-making machine U.S. Chesapeake and Leopold "Fulton's Folly" Harriet Fulton Phoenix Aaron Ogden Fort Pitt 350 miles monopoly

- 2. Pass out one index card to each student (more if there are extras).
- 3. Allow students to move around the room to share their card with others and try to piece together what the article might be about.
- 4. Provide students time to meet in groups to discuss what they believe the article they are about to read will be about.
- 5. Have students make a list of 5-10 sentences using the words they reviewed to predict what the article will be about. (Remind them that historians often have only limited success as they seek out information.)
- 6. Select one student from each group to act as scribe and have one be the presenter.
- 7. Post on the wall for all to review.
- 8. Then read the article with students. Allow them time to take notes.
- 9. Have students get back into their groups and make corrections to their predictions.

#### **Assessment:**

Symbols, such as a steamboat, can convey much more than just a picture. Have students list what symbols they would use to describe Robert Fulton Have students write a brief biography explaining which symbols they believe best portray his life and explain why using their notes.

#### **Enrichment:**

➤ Create a timeline of Robert Fulton's accomplishments, relating each accomplishment/event to the events in industrial/transportation/commerce history occurring at the same time in the United States and Europe.

# OPTION II ("Robert R. Livingston Enthusiastic Inventor, Prudent Entrepreneur"):

#### **Procedures:**

1. Put one word from the "Concept Splash" Word Bank (below) on each of the index cards.

"hobby horse" New York Society for the Promotion of Arts, Agriculture and Manufactures patent innovators steam navigation monopoly steamboat sloop stagecoach **Robert Fulton** diplomat Louisiana Purchase Marquis de Lafayette Phoenix Hope Perseverance **Hudson River Line** mechanics John Stevens James Rumsey New York State Legislature Nicholas Roosevelt foundry entrepreneurial shares

- 2. Pass out one index card to each student (more if there are extras).
- 3. Allow students to move around the room to share their card with others and try to piece together what the article might be about.
- 4. Provide students time to meet in groups to discuss what they believe the article they are about to read will be about.
- 5. Have students make a list of 5-10 sentences using the words they reviewed to predict what the article will be about. (Remind them that historians often have only limited success as they seek out information.)
- 6. Select one student from each group to act as scribe and have one be the presenter.
- 7. Post on the wall for all to review.
- 8. Then read the article with students. Allow them time to take notes.
- 9. Have students get back into their groups and make corrections to their predictions.

## **Assessment:**

Symbols, such as a steamboat, can convey much more than just a picture. Have students list what symbols they would use to describe Robert Livingston. Have students write a brief biography explaining which symbols they believe best portray his life and explain why using their notes.

# **Enrichment:**

➤ Create a timeline of Robert Livingston's accomplishments, relating each accomplishment/event to the events in industrial/transportation/commerce history occurring at the same time in the United States and Europe.

## **Combine the lessons:**

Teachers can divide the class into halves, allowing each half to conduct each lesson. They can then have each side share its t-charts with the other half of the class.