

Lesson: Social Studies Grades 4-6 Historical and Technological Developments



Past, Present and Future

Introduction

Objective:

- Student will analyze and evaluate the methods of river transportation of the past, and present.
- Student will create a method of river transportation for the future.

Academic Content Standards:

- ❖ National Standards for the Social Studies Curriculum Standards #1 Cultures
 - *The study of culture prepares students to ask an answer questions such as: what are the common characteristics of different cultures? ...*
- ❖ National Standards for the Social Studies Curriculum Standards #2 Time, Continuity and Change
 - *Human beings seek to understand their historical roots and to locate themselves in time. Knowing how to read and reconstruct the past allows one to develop a historical perspective and to answer questions such as: Who am I? What happened in the past? ...*
- ❖ National Standards for the Social Studies Curriculum Standards #3 People, Places and Environments:
 - *The study of people, places and human-environment interactions assists learners as they create their spatial views and geographic perspectives of the world beyond their personal locations. ...*
- ❖ National Standards for the Social Studies Curriculum Standards #8 Science, Technology and Society
 - *Modern life as we know it would be impossible without technology and the science that supports it. But technology brings with it many questions: Is this new technology always better than old? ...*
- ❖ Ohio Academic Content Standards for Social Studies: History
 - *Students use materials drawn from the diversity of human experience to analyze and interpret significant events, patterns, and themes in the history of Ohio, the United States and the world.*
 - *Benchmark: C (4th & 5th Grades)*
 - *Benchmark: B (6th Grade)*
- ❖ Ohio Academic Content Standards for Social Studies: Skills and Methods
 - *Students collect, organize, evaluate, and synthesize information from multiple sources in order to draw logical conclusions. Students communicate this information using appropriate social studies terminology in oral, written, or multimedia form and apply what they have learned to societal issues in simulated or real-world settings.*
 - *Benchmarks: A and B (4th & 5th Grades)*
 - *Benchmarks: A and B (6th Grade)*
- ❖ Ohio Academic Content Standards for Science: Science and Technology
 - *Students should recognize that science and technology are interconnected and that using technology involves assessment of benefits, risks and costs. Students should build scientific and technological knowledge, as well as the skill required to design and construct devices.*
 - *Benchmarks: A and B (4th & 5th Grades)*
 - *Benchmarks: A and B (6th Grade)*

Getting Started

Materials:

- Handout A
- Handout B

Vocabulary:

- Progress
- Innovation

Technology:

Internet access for research.

Web Links:

<http://www.lkwdpl.org/gr4test.wrirubr.htm> (Information on steamboats)

<http://streamboats.com> (Information on steamboats)

http://www.cincinnati.com/tallstacks/history_oct.html (Information on steamboats and Tall Stacks)

Lesson

Orientation Activity:

Discuss with students the concept of “progress.” Teacher and students will then generate an operational definition of the concept for classroom use. Teacher and students will continue with discussion for the reasons the city of Cincinnati celebrates *Tall Stacks* and reminisces about steamboats, when due to “progress,” they are no longer commonly used for passenger and freight transport.

Students will conduct research on the history of steamboats on the Ohio River using print, non-print and electronic resources. Students will record their notes on the graphic organizer, *Handout A*, and conclude findings with a summation of the current limited use of steamboats.

Learning Activity:

Review the facts about steamboats from students’ notes recorded their individual copies of *Handout A*. Discussion and question prompts include focus on the following: types of river transportation used currently such as motor or speed boats, sail boats, cruise ships/ocean liners, and barges.

Students will select one type of modern day river transportation for research, and list the additional facts on *Handout A*. Students will hypothesize on the possible factors for demise of the chosen modern day river vessel.

Evaluating the pros and cons of the present river transportation vessel, students will design a water vessel that is an improvement to both the past and present.

Students will draw an illustration of the vessel on *Handout B*, and write a paragraph explaining why this vessel is an improvement from past river transportation vessels, whether the purpose is for entertainment or transport. An extension activity is student research for obtaining a patent for their invention. (See, U.S. Patent web site, <http://www.uspto.gov/web/patents/howtopat.htm>)

With regards to the Tom Sawyer drama, students will describe on *Handout A* possible alternatives and alterations to the story had the available river transportation been other than a steamboat and raft. Question prompt: What would have changed if the story would have been set further in the past or set in the present or future?

Evaluation and Follow-Up

Assessment Tools and Methods:

Student completion of *Handouts A and B*. Students will provide a clear progression of innovation among river transportation in their writing.

Interdisciplinary Connections:

Mathematics: Use a spreadsheet to create a graph comparing the speed and/or fuel consumption of various river transportation vessels.

Science: Students research the steam engine and how it was used in other inventions.



Handout A

Name _____

Directions: Conduct research on steamboats and take notes below. Choose a river transportation vessel in the present day to conduct research on as well. Finally, design a river transportation vessel for the future and draw a picture of it on *Handout B*. Take note of predicted information for your vessel of the future on *Handout A*.

	Past	Present	Future
	Steamboat		
Speed			
Fuel			
Purpose			
Pros			
Cons			
Demise?			

Write a paragraph describing how the story in Tom Sawyer might change if it would have been set in the present or the future?

Handout B



Name _____

Directions: Draw a picture of your design for a river transportation vessel for the future. Below your design write a paragraph describing the vessel's innovations, and why it is an improvement from past models.

Vessel Design

Paragraph
