

Teacher's Guide: Building the Erie Canal

Recommended Grade Level: 5-8

(also applicable to grades 9-12 for students requiring significant support in learning)

Suggested Time: About 50-60 minutes spread over one or more class periods, plus additional time to complete a writing assignment

Goals

Following is the big idea that students should take away after completing this lesson:

- The construction of the Erie Canal affected the lives of many people in New York City, New York State, and the entire United States

Vocabulary

(See definitions on page 6.)

- canal
- commercial
- construction
- transport

Key Literacy Strategies

Following are the primary literacy strategies students will use to complete this activity:

- Categorizing basic facts and ideas (screen 10)
- Establishing cause and effect (screens 7 and 9, writing assignment 3)
- Determining important information (screens 4, 6, and 7, writing assignments 1 and 2)

Note: In addition to using the key literacy strategies listed above, students will use each of the strategies below to complete this lesson:

- Monitoring comprehension
- Synthesizing
- Making predictions
- Developing vocabulary
- Connecting prior knowledge to new learning
- Developing a topic in writing
- Identifying and using text features (photographs, captions, diagrams, and/or maps)

Overview

Building the Erie Canal is a student-directed learning experience. However, while students are expected to work through the lesson on their own, teachers should be available to keep the lesson on track, organize groupings, facilitate discussions, answer questions, and ensure that students meet all learning goals.

The following is a summary of the lesson screens:

- Screen 1: A question is posed: How did building a waterway through New York State change the course of U.S. history?
- Screen 2: Students read that the Erie Canal was an important development in transportation in the early 1800s that changed the future of the U.S.
- Screen 3: Students learn what the goals are for the lesson, which strategies they will be using to complete the lesson, and the important vocabulary words they will use during the lesson.
- Screen 4: Students read about the reasons people moved from the East Coast to the Northwest Territory, as well as the difficulties they faced when traveling that route. They also answer a question about the reasons why people made this move.
- Screen 5: Students read about New York Governor DeWitt Clinton’s plan to build a canal through New York State and the commercial advantages he believed the canal would bring to the state.
- Screen 6: Students read about the completion of the Erie Canal and answer a question about Governor Clinton’s role in making that happen.
- Screen 7: Students watch a video about the effects that the completed Erie Canal began to have on the Midwest, East Coast, and the nation. Students then answer three multiple-choice questions to show their comprehension of what they’ve learned so far
- Screen 8: Students complete an interactive vocabulary activity, and then choose two words from the vocabulary list and write a new sentence for each word. These tasks demonstrate their understanding of the meanings of the words.
- Screen 9: Students read a passage about how the Erie Canal affected commerce and travel in New York City, New York State, and the nation. After they have finished reading, they answer a question to demonstrate their understanding.
- Screen 10: Students use an interactive activity to categorize the effects that the Erie Canal had on three regions: New York City, upstate New York, and the Midwest and the United States.

Final

Assignment: Students select and complete a writing assignment about the lesson topic.

Before the Lesson

- Go through each screen of the lesson, including all the interactive activities, so that you can experience ahead of time what students will be doing. As you go through each screen, jot down your own expectations for students’ responses.

- ❑ Determine if students will be working individually or in pairs on the lesson. Some students may be able to work independently with little or no support. Students who are less familiar with the subject area or who struggle with literacy skills may benefit from working with another student. An effective way to do this is to pair a stronger student with a less able reader. You can also have students work individually on certain tasks and in pairs on others, depending on their experience and needs. If students will be working in pairs on any portion of the lesson, let them know if they will be expected to type in their notes individually or together.
- ❑ Provide instruction on key vocabulary (vocabulary words are defined in the lesson on screen 3, and on page 6 of this guide).
- ❑ Determine what students already know about the construction of the Erie Canal and its role in U.S. history. You may want to start a discussion with questions such as: How do you think people got food and other supplies not grown in their region 200 years ago? What were the problems in transporting these supplies from one place to another? What is a waterway? What is a canal? What is the purpose of a waterway or canal? You can also show students a map of the United States and locate Lake Erie and the route of the Erie Canal, then ask questions such as: What is the route of this waterway—the Erie Canal? Why do you think this was a good route for people living in America almost 200 years ago? Record their ideas on a chart. This will give you a sense of the background knowledge and possible misconceptions that students have before beginning this lesson. If time allows, return to the chart after students have completed the lesson to add new learning and correct misconceptions. Note: You may want to record their new learning in a different-colored ink so they can see how much they've learned.
- ❑ Arrange computers with Internet access so students can work individually or in pairs.
- ❑ Before students begin, suggest a timeline for completing the lesson, mention the different types of media they will encounter, and let them know how you expect them to submit their work. You may want to provide an outline of this information on a chart, chalkboard, or whiteboard, or as a handout.

Lesson Assessments

The following are descriptions of the lesson features that will be part of the packet of materials that students will submit. Students will use the packet for reference when writing their final assignment. It also serves as a formative assessment tool to monitor students' work as they're progressing through the lesson.

- **Notes** - Students take notes on screens 4, 6, and 9. If time allows, review their notes before students begin their writing assignment.
- **Multiple-choice questions** - Students complete the three questions on screen 7. Walk around to make sure students answer all three questions in the quiz before they move on. If students click to go to the next page before they finish, their work on the quiz will not be saved.
- **Match It!** - Students complete an interactive vocabulary activity on screen 8. They begin

by placing the vocabulary terms into the correct sentences. After they finish and save their work, they will be able to check their answers against an answer key. When they are done, they will be asked to choose two vocabulary words and write a new sentence for each word. Sentences should demonstrate a clear understanding of the meaning of each word. An inappropriate response would be “There was construction of the Erie Canal.” An appropriate response would be “The construction of the Erie Canal allowed people to travel more easily to the West.”

- **Arrange It!** - Students complete the concept map activity Arrange It! on screen 10. Students determine whether given facts about the Erie Canal reflect its effect on upstate New York, New York City, or the Midwest and U.S. Students will not be able to check their answers online, so you will need to provide them with correct answers when they are finished with the lesson. You can choose to review the answers as a class or return the corrected packet of materials to students before they begin the final assignment.

Following are the phrases students will drag and drop onto the concept map in the appropriate category:

Canal affects New York City

- Becomes major port for international trade
- Becomes commercial center of the U.S.

Canal affects upstate New York

- Growth in business and industry along canal route
- Growth in towns and cities along canal route

Canal affects the Midwest and United States

- Growth in population of new regions of country
 - Need for goods and services from the East Coast grows
 - New resources found for trade
 - More goods produced for trade
- **Final Assignment** - Students complete one final writing assignment. You can choose to let students make their own selection, or assign one according to your goals for the lesson. Use the rubric on page 7 to assess the writing assignments.

Lesson Aids and Extensions

Use the following suggestions to help students if they are stuck on a particular screen, to prepare students for completing their writing assignments, or as follow-up discussions to reinforce learning.

- **Watching Videos** - Encourage students to watch the video more than once. After the initial viewing, provide students with a specific content focus to frame their next viewing(s) of the video. This will help them draw connections between the main topic and the information that the video has to offer.

- **Participating in Discussions** - Organize class discussions or encourage students to talk about their questions in pairs. You may want to use the following discussion starters.
 - o How did faster travel between New York City and the Midwest change the way people in these areas did business?
 - o Why did businesses and towns along the canal route grow?
 - o Why do you think people were so opposed to Governor Clinton’s plan to build the canal?
 - o How do you think the new canal made the new nation of the United States stronger?
 - o Can you think of other things that were built in the United States—such as a building, bridge, or other structure—that changed life for people in an entire city or region of the country?
- **Reading the PDF Text** - Before they read the PDF text on screen 9, ask students to review how the Erie Canal improved life for many Americans. Ask them to consider who might not have benefited as much from the new waterway, and why. This will set students up for reading about how the North became economically stronger than the South after the canal opened.
- **Sharing Student Work** - It may be motivational, and a further learning opportunity, for students to post their final essays so that their classmates, peers, and/or parents can see them. This may also provide an opportunity for students to comment on and discuss each other’s essays.

If you do not already have access to an online writing community, Teaching Matters™ provides TeXT, free classroom publishing tools that allow teachers and students to create and publish their own online eZine. More information and a free signup are available at Teaching Matters: TeXT (<http://text.teachingmatters.org>).
- **Reflection and Self-Assessment** - After students have turned in their writing assignments, you can choose to have them assess their learning. Bring students together as a whole class or in small groups to discuss the questions below. You may want to return to the chart of their ideas developed before the lesson and record their new learning. You may also have students respond individually to the questions and then convene the class to discuss the chart.
 - o What did you learn?
 - o What was surprising?
 - o What questions do you still have?
 - o What was the easiest for you to understand and do?
 - o What was the most difficult?

Vocabulary Definitions

canal

A human-made waterway built for boats to travel from one body of water to another.

commercial

Something that involves the buying and selling of products and services. Goods are products that are bought and sold, and then used.

construction

The act or process of building or making something

transport

To move something, often across a great distance. Transportation is the act or the process of moving something.

Final Assignment Rubric Building the Erie Canal

- Describe at least three goals in building the Erie Canal across upstate New York. Include in your answer how each of these goals was reached.
- How did the Erie Canal change the economy of New York City and the United States?
- Imagine that you are traveling along the Erie Canal five years after its construction. Write a journal entry to describe some of the economic effects on the region that you might see.

4	3	2	1
<p>Provides a clear and accurate response to the question. Ideas are elaborated, with three or more relevant supporting details from the reading passage, video, and other materials in the lesson.</p>	<p>Provides an adequate response to the question. Topic and ideas are generally well organized, with two relevant supporting details from the reading passage, video, and other materials in the lesson.</p>	<p>Provides a generally accurate response, with one supporting detail from the reading passage, video, and other materials in the lesson.</p>	<p>Provides an inaccurate response to the question or fails to address the question. May include misinterpretations. Understanding of the topic is not apparent.</p>
<p>Uses at least three vocabulary words (or a form of the vocabulary words) from the lesson, and uses them all correctly.</p>	<p>Uses two vocabulary words (or a form of the vocabulary words) from the lesson, and uses them both correctly.</p>	<p>Uses one vocabulary word (or a form of the vocabulary word) from the lesson, and uses it correctly.</p>	<p>Does not use any vocabulary words, or uses vocabulary words incorrectly.</p>

Scoring the Rubric

Here are two suggestions for scoring the final assignment rubric. Select the option that best meets your needs or develop your own grading system.

Option 1: This option provides one score for each submitted assignment.

Assign a score of 4 or below for the written response (first row of the rubric) and a score of 4 or below for the use of vocabulary (second row of the rubric), for a total maximum score of 8. The interpretation of scores is as follows:

Score	Grade	Narrative Interpretation
7-8	A	Excellent
5-6	B	Good
4	C	Adequate (Fair)
3 or below	D	Minimal

Option 2: This option provides two scores for each submitted assignment: one for written content and one for the use of key vocabulary. An advantage of separate scores is that you can weight students' comprehension and composition differently than you do their knowledge of vocabulary. It can also help you identify specific needs for future instruction.

Assign a score of 4 or below for the written response (first row of the rubric) and a score of 4 or below for the use of vocabulary (second row of the rubric) and then score them separately. The interpretation of scores is as follows:

Score	Grade	Narrative Interpretation
4	A	Excellent
3	B	Good
2	C	Adequate (Fair)
1	D	Minimal

The final grade may look like this: A/B (A for content and B for vocabulary use).