Instructional Resources

Indiana Memory:

* (History of Transportation) <https://digital.library.in.gov/Record/WV3_isulib-4781>
* (Romance of Canal Locks) <https://digital.library.in.gov/Record/WV3_isulib-4818>
* (Route of the Wabash & Erie Canal) <https://digital.library.in.gov/Record/WV3_isulib-4801>

http://indianamuseum.org/pdfs/indiana\_historian\_canal\_construction.pdf

http://indianamuseum.org/pdfs/canal\_museum\_building\_canals.pdf

http://indianamuseum.org/pdfs/indiana\_historian\_canal\_mania.pdf

http://www.loc.gov

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Focus Questions

1. What is a canal?
2. How did people travel along canals?
3. Why travel on a canal instead of the road?
4. Why did canals fall out of favor?
5. What were the merits of trains?

Abstract

Through this unit, students will discover the modes and methods of transportation common in South East Indiana prior to 1865. The students will have the chance to examine primary sources, build canals, debate the merits of water and land transportation, and participate in a field trip.

**Course Title: Social Studies**

 Grade Level: 3rd

 Unit: Early Indiana Transportation

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| --- | --- | --- |
| Benchmarks | Assessment Tasks | Key Concepts |
| **3.1.4** Give examples of people, events and developments that brought important changes to the regions of Indiana**3.1.8** Write and illustrate descriptions of local communities and regions in Indiana past and present | 1. The students will produce an artifact demonstrating the ideas and concepts witnessed during the visit to the Whitewater Canal historic site.
2. After examining, primary source journals, the students will produce a written reflection of the life of those living and working on the canal, as opposed to the lives of the students.
 | * Canals
* Beasts of burden
* Aqueducts
* Railroads
 |

**Teacher Made Materials**

* Anticipation Guide sentence strips with T or F pieces
* Railroad/Canal T-chart handouts

**Catalog of Lessons**

**Lesson 1: Indiana Waterways**

The teacher will use the strategy of ‘anticipation guide’ to engage the students in the concept of canals. The anticipation guide questions include:

* The most popular form of transportation in the mid 1800s was the train. (T or F?)
* Canals are inexpensive to build. (T or F?)
* Horses were the main animals used to pull canal boats. (T or F?)

In addition, the students will watch a 13-minute video, *Indiana Waterways*. This video will lead to the discussion of early transportation options, and act as a gateway to explicit instruction regarding this unit.

**Lesson 2: Canals and Aqueducts**

The students will engineer their own canals. The students will be divided up into small teams to complete this task. The teams can choose from various materials. The materials are as follows: toy boats, sand, storage tubs, toy horses, metal gutters (cut in half), and a small bucket of water. The final product of this activity will demonstrate a mini version of a canal. This will give them an idea of the uses of canals in regard to transportation, as well as how difficult canals were to maintain. The students will be exposed to the use of aqueducts as a water bridge. The teacher will share several Library of Congress sourced photos the Duck Creek aqueduct.

**Lesson 3: Beasts of Burden**

The teacher will present a PowerPoint presentation focused on the history of the mules and other animals used to pull canal boats. The class will then participate in a discussion regarding why the mules, compared to other animals, were the best for the job. During the discussion, the class will be completing a Venn diagram charting the comparison of the animals.

**Lesson 4: Trains and Railroads**

Railroads are the primary reason for the disappearance of canal boats. With that knowledge and some explicit instruction from the teacher, the students will complete a T-chart of pros and cons regarding railroads. The class will then participate in a debate. One side will be “pro railroad” and the other side will be “pro canal boat”. The students will research their side of the argument and present their findings/arguments in a mock debate.

**Lesson 5: Field Trip**

The students will participate in a field trip to the Whitewater Canal State Historic Site in Metamora. Through this experience, the students will see, first hand, how the canal and aqueduct works. On site, the students will participate in the “Building a State: The Story of the Whitewater Canal” program. Through this program the students will gain a well-rounded understanding of life on the canal from the 1840’s to 1860’s, as well as some insight to the science and engineering aspects of the canal.

**DIRECTIONS**

"You have gotten the chance to learn about transportation along the Whitewater Canal, as well as some other forms of transportation that were used in South East Indiana pre 1900. Today you will be sharing the knowledge you’ve gained along your journey. Use the information from our lessons, along with what you witnessed during or field trip to create a representation showing that you understand the objective. You are more than welcome to use anything you see in this classroom to help your project take shape. Your project might be in the form of a sculpture, a song, a poem or short story. Use your imagination. However, please know, you must incorporate these three things:

1. Canals
2. Animals
3. Railroads

How you choose to do that is up to you. Additionally, you must share with the class what you’ve created. Your work will be submitted for display at the Whitewater Canal historic site.”

**PROCEDURE**

Through prompting and reminders of what the student have seen and learned, instruct the students to form some sort of representation of what they have learned from the preceding lessons and field trip to Metamora. This project may take many different manifestations. Encourage creativity. Remind the students, canals, animals, and railroads, must be exhibited in some form within their artifact.

**ABSTRACT**

Upon return to school, the student will produce an artifact demonstrating the ideas and concepts witnessed at the historic site. This artifact may include drawings, models, writing, dramatization or photo essays. Must show evidence of canals, animals, and railroads. In addition, the representation must exhibit facets of connection to present day life, as well as mention of historic life without this form of transportation.

**PROMPT**

Using evidence collected from the Metamora field trip and preceding lessons, the students will construct their project.

The students will be prompted to use any supply available in the room to demonstrate their knowledge of transportation along the Whitewater Canal.

Share the information that the scope of this artifact of knowledge is only limited by the boundaries of one’s imagination; creativity is valued.

The following, must be represented in some form:

1. Canals
2. Animals
3. Railroads

Show photos of field trip, or other primary source photos of the area to the students as a reminder, or to get the creativity flowing.

As a connection with the community, the work will be submitted to the Whitewater Canal historic site for potential display.

**COURSE TITLE: Social Studies**

GRADE LEVEL: 3rd

 UNIT: Early Indiana Transportation

Checklist

1. Canals \_\_\_\_\_\_\_\_\_\_
2. Animals \_\_\_\_\_\_\_\_\_\_
3. Trains \_\_\_\_\_\_\_\_\_\_

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| --- | --- |
| **BENCHMARK** | **SCORE** |
| **3.1.4** Give examples of people, events and developments that brought important changes to the regions of Indiana**3.1.8** Write and illustrate descriptions of local communities and regions in Indiana past and present | 0 | 1 | 2 | 3 |
| Artifact exhibits zero criteria points. | Artifact exhibits one critera point.  | Artifact exhibits two criteria points. | Artifact exhibits three criteria points. |
| 0 | 5 |
| Student exhibits no connection to present day life. | Student exhibits connection to present day life. |
| Student does not include mention of Indiana life without canal travel. | Student includeds mention of Indiana life without canal travel. |
| The student does not share his project with the class. | The student shares his project with the class. |

**ASSESSMENT RUBRIC**

**DIRECTIONS**

“We have talked about how hard it is to maintain a canal, why mules were the best animals to pull the boat, how railroads made canals disappear, and visited the wonderful historic site at Metamora. Now, I want you to put yourself into the time period of canals. We are going to read the journal of two sisters whose father was an operator for a canal boat. While reading the journal entries, I want you to read it like you are one of the daughters, and notice the feelings you have. Then everyone will write a simulated journal similar to what the sisters wrote, except, you will think about your life, your parents and write about how their career effects you. Your task today is to step into the lives of the girls and continue their journey. Create five more entries for their journal. Additionally, include two more entries, one giving the pros and cons of living on the canal, and the other comparing your own lives to the girls from the canal. Once you have finished you simulated journal we will share them with the class.”

**PROCEDURE**

Have multiple copies of the journal entries available to the students. Once the students have the journal entries, read the directions on how to complete their simulated journal. Model how the students should write their journal, reminding them that they must write 5 more entries from the point of view of the girls and two additional entries giving pros and cons of canal life and a comparison to life today.

**ABSTRACT**

During this task, the students will read passages from the journals of two little girls whose father operated a canal boat. The students step into the role of the girls and complete 5 more journal entries. In addition to the journal entries, the students will create a response to their entries. The responses will discuss the pros and cons of growing up on the canal, as opposed to elsewhere. Additionally, the students will compare their own lives to that of the girls.

**PROMPT**

These days, many of us cannot think about the world without cars. Believe it or not, there was a time when boats were the fastest way to travel. To understand early Indiana transportation, students need to relate the events to real-life. Having the students read journals written by children their age, from that time period, can open their minds and allow them to think about their parents’ careers and reflect upon their own lives.

A copy of the girl’s journal will be provided to each student for reading and reflective fodder.

The final product will be shared at a local meeting of the Junior Indiana Historical Society.

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| **BENCHMARK** | **SCORE** |
| **3.1.4** Give examples of people, events and developments that brought important changes to the regions of Indiana**3.1.8** Write and illustrate descriptions of local communities and regions in Indiana past and present | 0 | 1 | 2 | 3 |
| The student includes no historical facts in his/her journal | The student includes one histocial fact in his/her journal. | The student includes two historic facts in his/her journal. | The student includes three or more historic facts in his/her journal. |
| The student provides no pros and cons to life on the canal. | The student provides 2-3 pros and cons to life on the canal. | The student provides 2-3 pros and cons to life on the canal and justifies them. | The student provides 4 or more pros and cons to life on the canal and justifies them. |
| 0 | 5 |
| The student makes no connections between his/her life and that of the girls’ lives portrayed in the primary source journal entries.  | The student makes connections between his/her life and that of the girls’ lives portrayed in the primary source journal entries. |
| 0 | 5 |
| The student does not participate in sharing his/her stimulated journal with the Indiana Junior Historical Society | The student participates in sharing his/her stimulated journal with the Indiana Junior Historical Society |

**ASSESSMENT RUBRIC**