



DIGITALLY WRITING NEW HISTORIES

How Do We Keep The Great Lakes Great?



- 1. What makes the Great Lakes unique?**
- 2. How have people interacted with the Great Lakes in the past?**
- 3. What challenges face the Great Lakes today?**

How Do We Keep The Great Lakes Great?

Designed by:	Chelsea Blair
Unit Overview:	Students will gain geographical and historical understanding of the Great Lakes and how these iconic lakes have shaped life for Michigan citizens across time. Students will be introduced to current events challenging the current state of the lakes and invited to take action.
Grade Level(s):	2-5
Connection to Primary Source Materials	Library of Congress artifacts including print photos, text, journals and maps. Photos of artifacts from museum
Michigan Social Studies Standards Addressed:	<p>2-P4.2 Citizen Involvement Act constructively to further the public good.</p> <p>2-P4.2.1 Develop and implement an action plan to address or inform others about a public issue.</p> <p>2-P4.2.2 Participate in projects to help or inform others.</p> <p>2-H2.0.4 Describe changes in the local community over time (e.g., types of businesses, architecture and landscape, jobs, transportation, population).</p> <p>3 – H3.0.5 Use informational text and visual data to compare how Indigenous Peoples and non-Indigenous Peoples in the early history of Michigan interacted with, adapted to, used, and/or modified their environments.</p> <p>3 – G5.0.1 Describe how people are a part of, adapt to, use, and modify the physical environment of Michigan.</p> <p>3 – E1.0.3 Analyze how Michigan’s location and natural resources influenced its economic development.</p> <p>4 – H3.0.7 Describe past and current threats to Michigan’s natural resources and describe how state government, tribal and local governments, schools, organizations, and individuals worked in the past and continue to work today to protect its natural resources.</p>

C3 Indicators	geography history civics economics
Disciplinary Literacy Essential Practices:	3 Knowledge Constructor 3a Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits. 3d Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.
Other Relevant Standards, Connections to the CCSS, or the Context for the Unit	Common Core ELA Informational text CCSS.ELA-LITERACY.RI.2.3 CCSS.ELA-LITERACY.RI.3.3 CCSS.ELA-LITERACY.RI.5.3 CCSS.ELA-LITERACY.RI.5.5 CCSS.ELA-LITERACY.RI.5.7 CCSS.ELA-LITERACY.RI.5.9

Compelling Question:		
Will the Great Lakes Always Be Great?		
Supporting Question 1	Supporting Question 2	Supporting Question 3
What makes the Great Lakes unique?	How have people interacted with the Great Lakes in the past?	What challenges face the Great Lakes today?

Lesson 1: Geography and the Great Lakes

Supporting
Question 1:

What makes the Great Lakes unique?

Step 1

10:00

Welcome students to the lesson by announcing we are working as geographers.

Ask students what it means to be a geographer. Clarify that geographers study the earth, land systems, humans and animals.

Display a map of the Great Lakes.

Invite students to study the map for 60 seconds and to come up with a question a geographer might ask about this map.

Direct students to turn and talk about their questions with a partner.

Explain briefly to students the work of geographers:

geographers study the earth, land systems, humans and animals-- in other words--they study how humans interact with each other and with their environment

Invite them to be geographers for this lesson. As geographers they will

investigate sources and locate information to answer the question, What makes the Great Lakes unique?--the first question that needs to be answered in the larger investigation to answer the unit question, Will the Great Lakes always be great?

[Use Google Earth to show the Great Lakes](#)

ask students if they have heard about the acronym H.O.M.E.S when talking about the Great Lakes?

write H.O.M.E.S on the board vertically. Beside each letter write the corresponding Great Lake name.

as you navigate through through Google Earth invite students to think about what they already know about the Great Lakes

[Look at a map from 1755 and ask:](#)

What is the same about this map?

What is different?

(possible e.g. I see the Great Lakes but Michigan is a different shape, I see islands on Lake Superior)

Step 2

15:00

Classroom (F2F):

1. Invite students to write down one thing they know about the Great Lakes by and write it on a sticky note.
2. Have each student bring their note to the board.

Online:

1. [Use Google Jamboard Template](#) to identify what they already know about the Great Lakes.
2. Ask students to write a sticky note expressing what they already know about the Great Lakes. explain that we can review and revise these throughout the unit.
3. Review the shared information about the Great Lakes.
4. Read each statement.
5. Discuss as a class what is noted more than once.
6. Start asking questions as geographers--given what we know--what kinds of questions can we start asking? What do these questions make you wonder or want to know more about? What do you think is unique about these lakes? How might they be different from other bodies of water?
7. Record students' questions on the second *Google Jamboard slide.
8. Tell students we will monitor our learning by tracking our questions. As they find new information and answer questions the slide will be revised.
9. For example a student may write, "I know the Great Lakes are huge!" To that a student might wonder - exactly how big are the Great Lakes? A student may state that Michigan is surrounded by Great Lakes. A student may wonder if there are other states around the Great Lakes.
10. *Alternatively, allow students to record their own questions in a social studies notebook or on paper. This will allow students to monitor their learning and serve as a guide for research.

Step 3

10:00

Classroom (F2F)/Online:

- Explain that as geographers seek to answer their questions they need to use reliable (expert) sources.
- Direct them to the following site and facilitate a brief discussion about how geographers know whether sources are reliable.
- open the link to *Sea Grant Michigan
- direct students to find information on who created this website.
- direct attention to the web address bar and decode the web address.
- What words do we see?
- What does .org mean?
- Scroll to the bottom of the site and note that often we find more information about the author of the site here.
- On this site we see the publisher is a collaboration of
- Assure students they will revisit this site to investigate our question for lesson

*If unable to navigate in class or online, print this link. Link contains screenshot of website for quick lesson on evaluating sources.

- Invite the students to now dig into what makes the Great Lakes unique by watching the following TedEd video.
- Alert them to how fast the information will be coming at them in this awesome 5 minute video.
- Tell them that when they are done they will be asked to turn and talk to a partner about something they found was interesting.
- [Watch TedEd What's So Great About The Great Lakes By: Cheri Dobbs and Jennifer Gabrys](#)
- Conduct turn and talk.
- Whole group discussion: (record student responses on an anchor chart)
- From your findings in the video, what are you beginning to understand about what might make the Great Lakes unique

Step 4

Direct students to complete [*this short assessment.](#)

*Review response of how Great Lakes were used in the past.

The next lesson will focus on the Great Lakes past of industry, transportation and as a resource for water and sustainability.

Look for student response to uniqueness and number of Great Lakes for accuracy.

Lesson 2: First people of the Great Lakes region

Supporting
Question 2:

How have people interacted with the Great Lakes in the past?

Step 1

45:00

Welcome students to the lesson by explaining that today we are participating as historians. We want to determine how people have interacted with the Great Lakes through history.

Ask students to consider who the very first people of Michigan were. Who lived exactly where our school is?

[Use this link](#) to type your school address and discover which Indigenous people lived in your location.

Remind/explain to students that before European explorers came to North America the first people to live here were Indigenous / Native Americans.

How can we prove who lived here first? Partly with the work historians do.

Ask students what it means to be a historian?

Summarize that historians collect and evaluate information from a variety of sources (artifacts, documents, etc.) and determine authenticity in order to make sense of the world around us - past and present.

3. To begin, let's investigate this photograph of an artifact found near Lake Superior.

[*Link to page 2 on JamBoard](#)

Thinking like historians:

What do we see, think, wonder?

Possible examples may include; This item looks rusted, it looks like a weapon, it was a tool etc.

When students comment about the material encourage them to expand on their statement, why does the material matter?

4. [Click to page 3](#) on Jamboard to learn more about the item.

5. [Click to Page 4](#) on JamBoard for links to additional video on ancient copper culture 7min video.

* Before starting the video, "we will watch a short video about new discoveries in the copper culture era - listen for information about how people used the Great Lakes".

Have students turn and talk about what they learned.

Now that we know more about who the first people were in the region, let's document what we know so we can reflect on this later.

6. Start a new anchor chart to record land uses throughout Great Lake history. Add copper mining as the first item.

Step 2

Welcome students back to exploring history again as economist

Ask students what they think economists do.

Clarify that economists study how people use resources such as land and raw materials to make goods and services.

Tell students we are going to move forward in time - to when explorers arrived in this area. We are jumping forward to the later 1600's-1900's.

Access Page 5 -6 of JamBoard

One of the first explorers was Jacques Cartier - a French explorer who is credited as one of the first to make contact with the Indigenous People.

Tell students other French explorers continued Cartier's work and traveled from Canada through the Great Lakes.

For more information use this [Google Earth Mini Lesson of French Explorers and their routes along the Great Lakes.](#)

Have students turn and talk about why French Explorers may have been so interested in the Great Lakes?

What details would an economist be looking for when researching this time period?

Possible examples may include; North West Passage, items to trade, adventure.

Have students share their answers.

Explain that as French explorers discovered new land they began to claim land for their country. Other European explorers such as the British did the same.

Claiming land and setting up trading posts proved profitable for the counties who sponsored explorers expeditions.

Europeans traded furs and items with Indigenous People.

Tell students historians have found records of fur traders. Let's take a look at a journal written by a trader.

[Click this link for the Wisconsin Fur Trader Journal 1803-1804](#)

Read pages 398-400 - note the biographical information listed by the Library of Congress.

Ask students to consider what everyday life would have been like. What details from the journal support that?

After examining the entries, scroll down to show students the information about the item kept by the Library of Congress.

Explain eventually France and Great Britain have a war over land ownership.

Bonus Video - 1:12:33 Video of Lake Superior history. Reviews Indigenous People, Europeans settlement, industry.

State that as time passed and the population grew after settlements were created we saw a new way people used the Great Lakes.

Ask students to notice that as history progresses we see that people are creating businesses by using the materials they find in and around the Great Lakes.

[Tell students we will watch a short video of the steam ship business popular in the 1900s.](#)

Great Lakes Ships and Shipping Songs - <https://blogs.loc.gov/folklife/2018/10/songs-of-great-lakes-ships/>

Logging has become a growing industry.

Ask students to turn and talk about what they know about logging.

[Explore Michigan Logging video.](#)

[Bonus: Site The Great Lakes Logging Industry](#)

Includes interactive map of logging camps and primary sources.

[Bonus: Logging songs -Folksongs from history](#)

[Bonus: Clear cut forest site](#)

Explore with students Distance Tables of the Great Lakes book published in 1919. Why did the author write this?

How would this be helpful to Michigan loggers?

*Tell students that Michigan still has an active logging industry.

Access [this article by MSU with economic information about the logging industry in present day.](#)

Note the source url and information on bottom of site for students to judge reliability.

Have students turn and talk about what they learned.

5. Finally tell students our last bit of evidence for how the Great Lakes were used will be a short, [10 minute Video](#) where we will learn about the importance of Detroit.

Have students turn and talk.

Open 7 and slide 8 on JamBoard

As a class review slide 7. Note two columns.

Repeat for slide 8 with class adding to the second column.

Step 3	<p>6. Now that students have seen the two examples of JamBoard slides, open slide 8</p> <p>On notebook paper or their own JamBoard have students create their own two column 'Present Day' organizer.</p> <p>.Announce that as our final opportunity we will gather our last bit of information and record it on our charts.</p> <p>Invasive Species Video 8:22</p> <p>Micropastic in Great Lakes 8:17</p> <p>Pipeline in the Great Lakes 8:03</p> <p>7. Have students turn and talk about what they think the biggest concern for the Great Lakes is.</p>
Formative Assessment Task:	<p>Look for at least one clear connection to technology/industry and the effect on the Great Lakes.</p>

Lesson 3: The Great Lakes in Present Time	
Supporting Question 3:	What challenges face the Great Lakes today?
Step 1	<p>Announce we will further our understanding of the Great Lakes by thinking as citizens of the Great Lakes region.</p> <p>Ask students, what does it mean to be a citizen?</p> <p>Ask students to share with a partner why knowing about the Great Lakes is important as a citizen of the Great Lakes region.</p> <p>Ask students to share aloud any answers.</p> <p>Guide students to remembering the Great Lakes as a fresh water resource to many.</p>
Step 2	<p>Display all anchor charts created during the lesson so that students may view the content working forward.</p> <p>Announce we will begin working on our final research task.</p>
Formative Assessment Task	<p>Pass out research gathering sheet.</p> <p>Break students into five groups. Each group will be assigned one Great Lake to focus on for their project.</p> <p>Announce that before we begin we should notice that the research sheet is asking for 'What person or group should be made aware of the issue at your Great Lake'.</p> <p>Tell students we will think of an example together before moving forward.</p> <p>Write 'Water Quality'</p> <p>Tell students if my issue is water quality and I am concerned about what is in my water, who should be made aware of this?</p> <p>Guide students to understand water treatment workers should be made aware, communities who share water should be made aware, government, etc.</p> <p>Allow students one class period to work together to find information about their Great Lakes and the issues they face.</p>

Summative Assessment

Students will create an infographic of their Great Lake and the issue it faces. Students will use their research and background knowledge to determine who needs to know this information and what technology could help improve their issue.

When students have completed their group sheets review for relevant information open this [infographic example](#).

Review the elements of the infographic that help a reader easily see the facts.

Tell students that today they will design their own infographic.

Using the research sheet students created, have students make their own infographic.

[JamBoard slide link](#) to display the elements the infographic should contain. Slide 10

Remind students of the anchor charts the class has created may be used as references.

Rubric

Summative Assessment Criteria	Expert 25	Proficient 20	Developing 15	Novice 10
Final infographic contains all elements of the research organization chart.	Student infographic contains all information required on the chart.	Student infographic contains some information required on the chart.	Student infographic contains little information required on the chart.	Student infographic contains no information required on the chart.

About the Inquiry Author



I am a social studies educator working with grades K-8. I am passionate about the inquiry design model and C3 framework. I grew up in Waterford, Michigan. My family and I love exploring Michigan's history. We enjoy spending time in the rivers kayaking and lakes.

Learn More About the Inquiry Here: