GREAT LAKES LEARNING

LESSONS & ACTIVITIES BASED ON THE MONTHLY GREAT LAKES NOW PROGRAM

EPISODE 1030 | POLITICAL BLIND DATE

THE POWER OF PERSPECTIVE

Image Credit: Great Lakes Now

OVERVIEW

This lesson will provide students opportunities to build perspective and empathy as they explore multiple points of view on a common issue by observing, and participating in discussions, of issues with people from different points of view. In doing so, they will explore and interpret different sources of information for point of view, context, bias, frame of reference, or perspective, as well as articulate their perspective on the issue after being informed about it.

WHAT YOU'LL NEED

- Computer or mobile device with Internet access to view video and online resources
- Notebooks and pencils
- Chart paper
- Sticky notes
- Markers
- Devices for recording and uploading video to the web
- Copies of the Student Handouts

LESSON OBJECTIVES

- **Know** the threat that lead pollution and nuclear waste disposal pose to water quality and human health
- **Understand** how point of view, context, bias, and frame of reference all can affect one's perspective
- **Be able to** articulate your own individual perspective on an issue as well as take the perspectives of others on the same issue through research, listening, and communication by conducting a pinwheel discussion.

INTRODUCTION

In this lesson, students will be introduced to different perspectives on two contemporary human activities that can impact water quality: infrastructure maintenance and the storage and disposal of nuclear waste from a power plant. Since many issues that affect public health, safety, and our environment are complex, it is important to consider multiple sides of an issue to understand the full picture and to inform potential solutions.

Students will learn about the impact of the Flint Water Crisis and a proposal to store nuclear nuclear waste products in a facility on the shores of Lake Huron.

Some prior knowledge* with which students should be familiar includes:

- Claim, evidence, reasoning (CER)
- Conducting background research
- The chemistry of ions and isotopes

Follow this QR Code or hyperlink to the Episode Landing Page!

Check out our online collection of lessons for more activities related to these topics.

****The sequence of these activities is flexible, and can be rearranged to fit your teaching needs.***

NGSS CONNECTIONS

Phenomenon: Water Quality

- SEP-6
- SEP-7
- SEP-1
- MS-ETS.B.3
- MS-ESS3.C
- MS-ESS3-1
- MS-ESS3-2
- MS-ESS3-4

During the course of the lesson, students will progress through the following sequence** of activities:

- Class discussion to elicit or activate prior knowledge
- Teacher notes on water pollution, nuclear waste, and perspective
- Perspective-taking exercises
- Watch a *Great Lakes Now* episode
- Class discussion to debrief the video
- Conduct a Pinwheel Discussion
- Read about the water quality and nuclear waste issues in the video
- Watch a documentary on the Flint Water Crisis (optional)

The lesson progresses through three major sections: **launch, activities, and closure.** After the launch of the lesson sequence, you are ready to begin the lesson activities. Once finished with the activities, students will synthesize their learning in the closure section.

If you use this lesson or any of its activities with your learners, we'd love to hear about it!

Contact us with any feedback or questions at:
GreatLakesNow@DPTV.org

TEACHER BACKGROUND INFORMATION

by Great Lakes Now Contributor, Gary G. Abud, Jr.

**This information can be presented by the teacher as notes to students at the teacher's discretion.*

When having conversations of any kind, everyone brings a **perspective** to the discussion. Simply stated, a perspective is how one sees things. Similarly, **point of view** is the place from where one sees things from. Both matter a lot.

Yet perspective is shaped by thoughts, feelings, and emotions; furthermore, point of view can be affected by our experiences or our communities. And when having crucial conversations about important matters, it is especially important not only to understand our own perspective but that of others, too.

Based on understanding one another, and empathizing with one another, we can have better more productive conversations. What's more is it helps us to treat others with dignity and respect. And since people shape the laws and policies that structure our communities, perspective matters for more than just our opinions—it can affect our lives, too.

Depending on the age of your students, you may want to come up with your own appropriate definitions for the terms terms used in this lesson to share with your learners. These terms include: **point of view, context, bias, frame of reference, perspective,** as well as **primary** and **secondary sources.**

Students will need some background on the water quality issues at the heart of this lesson:

- lead contamination in water
- spent nuclear fuel storage

This video from PBS LearningMedia on nuclear waste can help students understand the basic science needed to better appreciate the issues with nuclear fuel. **This series of three short videos from PBS LearningMedia** can clarify the chemistry behind the lead-poisoned water in Flint, MI.

Since students will be observing the conversations that policymakers are having around an issue, it will be important for them to evaluate what is being said, how it is being said, and why it is being said. So, review the framework of **Claim-Evidence-Reasoning (CER)** so that they can spot the CERs used by different sources.

Finally, as students learn about this topic, they'll be honing skills in literacy, communication, and research. They'll work to understand multiple sides of an issue, separate fact from opinion, and formulate an informed well-rounded perspective on an issue. As they prepare for a Pinwheel Discussion, they'll need to learn questions to ask to help them understand others as they talk and listen in their discussions.

Questions like these are known as **perspective-seeking questions**, and they include questions intended to:

clarify:

- *"what do you mean by that?"*

understand:

- *"how did you come to that conclusion?"*

invite:

- *"have you considered...?"*

LESSON LAUNCH

A. Warm Up

The warm up is intended to be structured as teacher-facilitated, whole-group student discussion activities.

Begin by engaging students in a thought experiment to consider some birds looking into a castle through a colorful stained-glass window:

1. Ask students what the birds would observe. Then solicit a few responses.
2. Ask students how the birds would describe the inside of the castle. Then solicit a few responses.
3. Ask students why the birds would describe the castle that way. Then solicit a few responses.
4. Help students to make the connection between the vantage point from which each bird sees the inside of the castle (e.g., that they each may be looking through different colored sections of stained glass) and what they would notice (a different perspective of the same castle).
5. Point out that until the birds consider another viewpoint, they'll only see the castle in a singular way.

Photo Credit: Great Lakes Now

B. Bridge to Learning

After the warm up activity has concluded, help students prepare for the learning that is about to come.

1. Ask them to partner up one another student.
2. Tell all students that on the count of three, they each are going to quickly snap their fingers five times on one hand and then air draw a capital letter F on their own forehead so that their partner sees it.
3. Countdown 3, 2, 1...go!
4. After students complete the activity, ask for a show of hands: how many people saw their partner draw the letter F correctly? How many backwards?
5. Have a few student pairs share out what they observed and discuss the responses.
6. Help students to notice that they have to draw the letter with their partner's perspective in mind, not their own. Then
7. Give everyone another attempt to draw the letter F on their forehead.
8. Ask students to talk with their partner and define "**perspective**"
9. Solicit ideas and discuss possible definitions with the entire group until you arrive at a workable one.

C. Background Information Notes

Explain that these activities we just did are intended to draw student attention to the ideas of perspective and point of view. At this point in the lesson, you can directly provide students additional notes and watch the video clips included in the **Teacher Background Information** connecting it to the warm up activities.

ACTIVITY 1: WATCH A GREAT LAKES NOW SEGMENT

This activity is a video discussion of a *Great Lakes Now* episode segment.

First, inform students that they will be watching a video from *Great Lakes Now* that discusses water quality issues from the perspectives of multiple people. During the video they need to jot down 4 things they took away from watching using the **4 Notes Summary Protocol**.

Then, if students are not already familiar, introduce them to the 4 Notes Summary Protocol, which they will use after they finish watching the video, where they write down one of each of the following notes:

- **Oooh!** (something that was interesting)
- **Aaah!** (something that was an ah-ha moment)
- **Hmmm…** (something that left them wanting to know more)
- **Huh?** (a question they have afterward)

Next, have students watch this segment from episode 1030 of *Great Lakes Now* called, **Political Blind Date**.

Last, have students complete their individual 4 Notes Summary and then discuss those in groups of 3-4 students.

Teaching Tip: Use the Student Handouts to help students organize their thinking in writing around each of the lesson protocols.

Post-Video Discussion

After the groups have had time to go over their 4 Notes Summaries, invite a handful of students to share out some of their notes, eliciting at least 1-2 of each of the 4 Notes and listing those somewhere for the whole group to see.

Ask students to turn back and talk with their groups to make connections between the video and what they did in the warm up activities, with the discussion of the birds looking in the castle window and drawing the letter F on their foreheads, asking them:

How is what we saw in the video related to our warm up activities?

After giving the groups some time to talk, bring the whole group back together for a shareout and discussion of ideas.

In this culminating discussion, the goal is to help students make connections between the perspectives expressed on the issues in the episode and how those perspectives are shaped, just like how perspective was in the warm up.

Once the discussion finishes, have each student write a "**Sum It Up**" statement in their notebooks. This is a single sentence that captures the big idea of what was just learned.

Have 2-3 students share out their **Sum It Up** statements before concluding this activity.

ACTIVITY 2: READ ABOUT THE ISSUES

This activity aims to provide students a better understanding of the two water-quality issues at the heart of this lesson: lead contamination in Flint Michigan's drinking water and the potential storage of nuclear waste in Ontario near Lake Huron.

They will read about these two issues to gain additional information and perspective on them with the goal of reading about each to make text-to-text connections as they study these issues.

In this activity, students will use the **Three Reads Protocol** for analyzing and discussing *the information* in each article with a partner. Afterward, they will use the **Compare and Connect Protocol** for analyzing and discussing *the perspectives* of the two articles together in a group.

First, distribute the articles entitled "**Debate continues over long-term storage of nuclear waste in the Great Lakes**" by Andrew Reeves and "**Flint families welcome water crisis charges, seek healing**" by the Associated Press, both from *Great Lakes Now*. Give students time individually to read each article, and ask them to jot down 3 things they learned from each article in their notes.

Then, have students pair up with a partner to separately discuss each article using the **Three Reads Protocol**.

Next, have two student pairs join up to form a small group and discuss the perspectives of the two articles using the **Compare and Connect Protocol**.

Last, have each group come up with a summary statement about the most important points from their discussion and ask for a volunteer in each group to share that most important point with the whole group. As student groups share out their most important point, record their ideas on the board and have students copy the list of student ideas down into their notebooks. Finally, have groups discuss one last question from the articles:

How did *your perspective* on the issue change because of reading?

Inform them that they will be using some of the information from these articles and their discussion in a later activity called a **Pinwheel Discussion**.

Further Learning on the Subject:
*Access this additional special documentary, entitled, "**The Door Flint Opened: America's Drinking Water Crisis**" from Great Lakes Now as an optional extension activity for students to do further research by watching and discussing it in groups using the **Think Pair Square Protocol** as part of their research.*

Teaching Tip: Use the Student Handouts to help students organize their thinking in writing around each of the lesson protocols.

ACTIVITY 3: PINWHEEL DISCUSSION

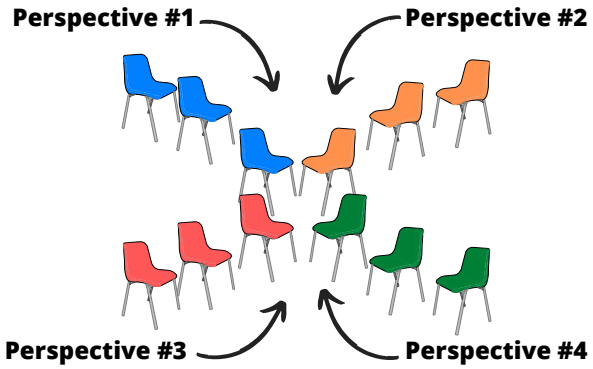

Image Credit: Gary Abud, Jr.

The purpose of this activity is for students to engage in a Pinwheel Discussion about an issue from multiple perspectives by designating each student in the discussion to represent a single perspective on the issue.

Four chairs are arranged facing each other in the middle, one for each speaker representing each perspective. Other students who represent the same perspective—but who will participate in the discussion at a later time—sit near their perspective's active speaker to observe. The chairs fan out in multiple directions like the shape of a pinwheel.

Pinwheel Discussions can be held to help individuals consider different perspectives on an issue and discuss it from multiple points of view. Unlike a debate, the perspectives in this format may not directly oppose one another.

***Teaching Tips*: Encourage students to use the CER Protocol handout to plan their discussion. Then, during the discussion, they can jot down notes (both when speaking or observing) so that they can respond accurately to what they heard when it's their turn to speak, and reflect on it after the discussion.**

First, create groups of 3-4 students for each perspective be represented (e.g., citizen, leader, etc.) Some pinwheels also have a group called Provocateurs who stimulate the discussion and prompt further consideration, but it is not necessary to have this group.

Then, decide which issue which groups will discuss (nuclear waste or water) and give each group time to research the topic and their perspective on it so that they can be prepared to discuss and summarize their point of view. Advise them to prepare some main points, questions, or examples to raise. They should reference any primary and secondary sources in their research.

Next, each group decides who will speak for their perspective. Speakers sit facing each other in a square (see diagram) with group members behind them. The teacher (or Provocateur) starts off with a general question which the other speakers discuss. Everyone should stay true to the viewpoint their group represents in discussion. The conversation does not need to stay on that question the whole time (e.g., it is not a Q&A format). After some time, students rotate speakers for each perspective to carry on the discussion.

Last, allow time at the end of the Pinwheel for all students to reflect on the discussion, focusing on what what well, what did not go well, and what they learned from the process of considering other perspectives.

LESSON CLOSURE

After the conclusion of all the activities, help students to make connections* between everything they did in the lesson and what they learned overall by:

A. Compare and Connect

Initiate a discussion with students where you ask them to identify ways in which each activity corresponded to the other activities. This could be in terms of what was done, what was learned, or specific moments of the activities that corresponded with others. Guide students to refer to each other's thinking by asking them to make connections between specific features of the activities and how they all connect to the big ideas of the lesson. Make sure to invite students to connect other students' responses to their own ideas in the discussion.

B. Lesson Synthesis

Give students individual thinking and writing time in their notebooks to synthesize their learning, by jotting down their own reflections using the **Word, Phrase, Sentence Protocol.**

In the Word-Phrase-Sentence Protocol, students write:

- A **word** that they thought was most important from the lesson
- A **phrase** that they would like to remember
- A **sentence** that sums up what they learned in the lesson

C. Cool Down

After the individual synthesis is complete, students should share their synthesis with a partner.

After sharing their syntheses, have students complete a **3, 2, 1 Review** for the lesson with their partner, recording in their notebooks or, optionally, on exit ticket slips to submit, each of the following:

- **3 things** that they liked or learned
- **2 ideas** that make more sense now
- **1 question** that they were left with

Invite several students to share aloud what they wrote in either the synthesis or 3, 2, 1 Review.

Lastly, ask one student volunteer to summarize what has been heard from the students as a final summary of student learning.

**Optionally here, the teacher can revisit the learning objectives and make connections more explicit for students.*

Teaching Tip: Use the Student Handouts to help students organize their thinking in writing around each of the lesson protocols.

FURTHER LEARNING: FLINT WATER CRISIS

This optional extension activity aims to provide students additional research information for a better understanding of just what happened in the Flint Water Crisis and why it mattered.

They will watch a special documentary about the lead contamination in Flint's water entitled, "**The Door Flint Opened: America's Drinking Water Crisis**" from *Great Lakes Now* and discuss it using the **Think Pair Square Protocol**. In doing so, they will gather additional information as part of their research on the issue of water quality.

First, have students watch the documentary and ask them to jot down at least 3 things they learned from it.

Then, have students pair up with a partner to discuss the documentary and the points they noted from it.

Next, have two student pairs join up, standing near each other to form the four corners of a square, to discuss the documentary and what they talked about in their pairs.

Last, have each group come up with a summary statement about the most important point from their discussion and ask for a volunteer in each group to share that most important point with the whole group.

Image Credit: Great Lakes Now

As student groups share out their most important point, record their ideas on the board and have students copy the list of student ideas down into their notebooks.

Inform them that they can use some of the information from this documentary and discussion in their research as they prepare for their Pinwheel Discussion.

After the shareout is complete, ask students to return to their groups and discuss one last question based on the documentary:

How do you think the experience of living through Flint's Water Crisis has affected the *perspective* of Flint residents on water quality issues?

After giving the groups some time to discuss this question, open up the conversation to the entire group to share and dialogue about how the perspective of individuals is shaped by their experience.

NAME: _____

A Word, Phrase, Sentence Protocol

What is a **word** that you thought was most important from this lesson?

What is a **phrase** that you would like to remember from this lesson?

What is a **sentence** that sums up what you learned in this lesson?

3, 2, 1 Review Protocol

What are **3 things that you liked or learned** from this lesson's activities?

-
-
-

What are **2 ideas that make more sense** now to you?

-
-

What is **1 question that you were left with** after this lesson?

-

NAME: _____

4 Notes Summary Protocol

OOOH!

Something that was interesting to you

AAAH!

Something that became clearer; an "ah-ha" moment

HMMM...

Something that left you wanting to learn more

HUH?

Something you questioned or wondered

Sum It Up Statement:

Summarize your group discussion about your 4 Notes Summaries below:

NAME: _____

Think Pair Square Protocol

THINK

Summarize your own individual takeaways and ideas

PAIR

Summarize what you and your partner discussed

SQUARE

Summarize what your group discussed

NAME: _____

Compare and Connect Protocol

SIMILARITIES

Describe what you noticed that was the same in each

DIFFERENCES

Describe what you noticed that was different in each

CONNECTIONS

Describe how the similarities connect to the differences

NAME: _____

Three Reads Protocol

WHAT WAS SAID?

*Read it once, focusing on **what** was said, and then summarize your thoughts in the space below*

HOW WAS IT SAID?

*Read it a second time, focusing on **how** they said what they said, and then summarize your thoughts in the space below*

WHY WAS IT SAID?

*Read it a third time, focusing on **why** they said what they said, and then summarize your thoughts in the space below*

NAME: _____

CER Protocol

CLAIM

The idea, or ideas, that you think are true or important

EVIDENCE

The facts or data that support the truth of the claim

REASONING

An explanation of how the evidence supports the claim