



Creative Lessons To Open Classrooms & Minds To The World.

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Ninth Grade Lesson Plan

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LESSON PLAN TITLE

Making Waves: Discussing Water and Quality of Life

DESIGNERS

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SUMMARY AND RATIONALE

The United Nations Sustainable Goal number 6 states that due to bad economics or poor infrastructure, millions of people including children die every year from diseases associated with inadequate water supply, sanitation and hygiene. Having access to clean water is an essential part of life and a human right, and therefore an essential concern for urban, rural, and other communities in an urbanizing world.

In this lesson, students will research efforts that different communities in the world are making to help people access clean water and maintain it. Students will explore what causes shortages of water and how people survive in environments that lack good drinking water. A three to four day lesson plan that includes questions and research activities will provide students with the opportunity to compare the issues and efforts surrounding water in their own communities to issues and efforts in other US and global communities. Making these comparisons will allow students to reflect and propose possible solutions to issues and challenges found in different types of communities: urban, rural, suburban, or urbanizing.

GRADE

9th

TIME FRAME

Two days - 45 Minute Lessons

SUBJECTS

Social studies science English ELL world languages

INSTRUCTIONAL GOAL:

To recognize having access to water as a human right that is essential for individual's daily living, as well as for sustainable development in all communities.

• To learn through research what various societies in the world are doing to help individuals have access to water in their communities (urban, rural, suburban or urbanized), and what they are doing to maintain it.

• To compare the efforts that different societies (including my own) are making to guarantee that all individuals have access to water, and to recognize differences and similarities between them.

• To make connections between global and local issues in relation to access to water, and to find possible solutions to those issues.

STANDARDS

1. UN Sustainable Development Goal Number 16: Promote Just, Peaceful, and Inclusive Societies. Peace, Justice, and Strong institutions.

GOAL TARGETS

• **16.6** Develop effective, accountable, and transparent institutions at all levels.

• 16.12 Promote and enforce non-discriminatory laws and policies for sustainable development.

2. UN Sustainable Development Goal Number 6: Ensure Access to Water and Sanitation for all. Clean Water and Sanitation.

GOAL TARGETS

• 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

• 6.B Support and strengthen the participation of local communities in improving water and sanitation management.

3. UN Sustainable Development Goal Number 11: Make Cities Inclusive, Safe, Resilient, and Sustainable: Sustainable cities and communities.

GOAL TARGETS

• 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

• 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

• 11.A Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.

UNDERSTANDING

• Access to clean water is a human right that is essential for both the survival of the species and for living daily life in a healthy and successful way.

• All communities worldwide have the responsibility to ensure that all members have access to water in an equitable way, regardless of race, socioeconomic status, age, area of living, etc.

• All communities should create and foster an environment that promotes appropriate discourse surrounding equitable ways of accessing clean water both locally and globally.

ESSENTIAL QUESTIONS

• How do different communities in the world (urban, rural, or urbanizing) support access to clean water for all?

• How do individuals survive with limited access to clean water?

STUDENT LEARNING OBJECTIVES

• Students will be able to identify arguments to support a position on an issue by achieving 2 out of 3 on the rubric.

• Students will be able to articulate positions while responding to the ideas of others while using discussion/starter stems by achieving 2 out of 3 on the rubric.

• Students will reflect on the quality of participation in the debate.

• Students will be able to distinguish between opinion, preferences, and biases from researched facts and will use confirmed data to uphold their discussion contributions by achieving 2 out of 3 on the rubric.

• Students will be able to use appropriate presentation behavior during the group discussion by using appropriate volume control and turn taking by achieving 2 out of 3 on the rubric.

• Students will be able to use appropriate participation behavior during the group discussion by using appropriate eye contact, body language, active listening skills, and appropriate respectful behavior when others are speaking during the discussion by achieving 2 out of 3 on the rubric.

ASSESSMENT

Rubric for assessment of information/test-based constructed response

FISHBOWL DISCUSSION



	Does not yet Meet the Standard (1 point)	Meets the Standard (2 points)	Exceeds the Standard (3 points)
Quality of Information Discussed	*student does not answer the questions asked *student focuses on personal opinions rather than evidence	*student answers the questions asked with minimal sidetracking *student uses some evidence to support their claims	*student stays on topic and answers the questions asked *student uses EVIDENCE to support claims, not personal opinions *student uses discussion starters/stems *student addresses classmates by name
Student Participation	*student does not participate in the discussion *student has a lot of idle time spent not speaking	*student rarely participates in the discussion *student has some idle time spent not speaking	*student participates in the discussion *student utilizes the entire discussion effectively from start to finish
Quality of Presentation	*the student is rude to others *student attacks other students personally *student is loud and/or rowdy	*student exhibits mixed behaviors during the discussion *student speaks at an appropriate volume for most of the discussion	*student is polite and respectful to their peers during the discussion *student speaks at an appropriate volume for the entire discussion
Spectator Participation	*student does not participate as a spectator *student distracts groups who are discussing	*student provides some comments for both groups *student remains quiet for most their peers' discussions	*student provides meaningful comments for both groups *student is quiet and respectful of their peers during the discussion
Total Score: /12			

SEQUENCE OF ACTIVITIES

Prior to this lesson: Students will have been given the 4 or 5 guiding questions to help guide students in their research. Students will be gathering information on two communities, their own and one of their choosing (or the teacher's choosing).

GUIDING QUESTIONS

- How has water impacted culture?
- What actions do people take when they have limited access to clean water?
- Why do some communities not have access to clean water?
- What impact does shortage of water have on quality of life?
- What actions can have an impact water shortages?

OPENER

Students examine the four photographs that display images of water throughout the world. How can you relate to the different pictures shown? Think, pair, share these photographs. This leads to the teacher introducing the lesson and leading the discussion before students are broken into groups.



ROOM SETUP

Place half the desks in a circle in the center of the room. Form a second circle of desks around the first.







Here are some copyright free pictures. These pictures are from https://www.pexels.com/ search/water/. Teachers may use pictures from this website free of charge.



LESSON

Students will be broken down into two groups. Using the research completed the day before, students will use their data to respond to the four key questions. Students will have been given the discussion questions the day before and they will prepare to answer all of them but, they will discuss only two during the Fish Bowl. Students will be encouraged to use accountable talk during the discussion.

Half the group will discuss two questions while the other half listens and makes observations. Then the groups will flip-flop. The half that is observing the discussion is expected to fill out a "Student Spectator Comment Sheet."

Each discussion will be 10 minutes long. Students will not know before-hand which question they will be discussing. Students will be graded on the quality of their discussion as well as their written comments as spectators.

WATER NOTES

• Question:

A helpful fact I learn	This fact made me curious about	I found out	Document resources here

Name:				
Fishbowl Discussion Notes				
My personal goals for today:				
Speaking	Listening			
Space for Notes from My Discussion				



STUDENT SPECTATOR COMMENT SHEET

YOUR NAME: __

• Listen carefully as your classmates discuss two questions. Jot down your observations on how your classmates discuss their responses to the two questions. Listen to see if your peers use evidence to support their statements.



POSITIVE POINTS

NAME	POSITIVE POINTS

MISSED OPPORTUNITIES

NAME	OPPORTUNITIES MISSED

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CLOSING

Students will complete an Exit Slip - How could you impact a water shortage?

• Use the discussion points collected during the Fish Bowl to write a position or argument paper.

• Create a work of art that reflects both sides of the discussion.

• Role play a perspective in this discussion (represent a corporation, government representative, a student, a farmer, etc.)

• For students with more experience in organized discussions, have students prioritize water needs in their discussion.

• Develop a piece to be used on social media that shares both sides of the discussion.

• Write a take-action letter to a local or international legislator proposing a plan that is supported by evidence collected during the research and arguments used during the discussion .

• Perform an experiment to see how much water is used when brushing your teeth, bathing, cleaning dishes, etc. Adjust see if you can cut down the amount of water used in your home. Share ideas on how you can persuade other family members to reduce the amount of water used in your home.

• Create a survey to better understand the views your peers and/or community members have about water. As a class or small group use the information you gained from the fishbowl activity to decide which views are healthy and which ones are concerning. Create a plan to help make local changes to better impact our views on water.

• Decide the most important facts you learned during the fishbowl discussion. Create an infographic showing what you have learned. Share your infographic with your peers.

• Prepare to participate in a formal debate about water. Use the information you learned during the fishbowl discussion to help you prepare.

• Create a list of water related idioms. In teams identify a connections of what was learned during the fishbowl discussion and how they might relate to the listed idioms.

• Optional for the teacher who wishes to have students decide on making a global change about water by creating a campaign to spread the message around this issue: Ex. Display presentation in the gym or the cafeteria.

RESOURCES FOR STUDENTS

• What is a fishbowl discussion? What should you expect to do during this assignment?

- https://www.youtube.com/watch?v=JVCFGLVZA3w
- *Fishbowl Discussion: Examples and Techniques
- A guide to the SDG's for students and young people SDG $16 \rightarrow pg. 25$

https://www.unicef.org/agenda2030/files/TWWW_A4_Single_ Page_LowRes_English.pdf

• How Has Water Impacted Culture? Here is a starting point to help you research this topic.

https://www.who.int/water_sanitation_health/

Water&cultureEnglishv2.pdf

• https://sswm.info/arctic-wash/module-1-introduction/furtherresources-sustainability-relation-water-sanitation/water%2Csanitation-and-culture

http://www.dwaf.gov.za/Documents/Other/RMP/

SAADFCulturalWaterUseJun05.pdf

• What actions do people take when they have limited access to clean water? Here is a starting point to help you research this topic.

• https://www.theguardian.com/global-developmentprofessionals-network/2015/jul/01/global-access-clean-watersanitation-mapped

• https://www.sdcwa.org/water-shortage-and-drought-response

• https://theconversation.com/how-cape-towns-water-crisiscould-make-people-sick-91255

• https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-water-resources_.html

• Why do some communities not have access to clean water? Here is a starting point to help you research this topic.

- https://www.theguardian.com/environment/2012/nov/30/ climate-change-water
- http://efc.web.unc.edu/2018/02/13/clean-water-access-
- challenges-in-the-united-sta
- https://www.globalcitizen.org/en/content/why-do-so-many-people-still-struggle-to-access-cle/

• https://en.wikipedia.org/wiki/Water_issues_in_developing_countries

• What impact does shortage of water have on quality of life? Here is a starting point to help you research this topic.

- https://www.seametrics.com/blog/water-shortage-consequences/
- https://water.org/our-impact/water-crisis/

• https://www.who.int/news-room/fact-sheets/detail/drinking-water

- https://www.worldwildlife.org/threats/water-scarcity
- https://lifewater.org/blog/water-poverty/
- https://www.independent.co.uk/news/world/world-water-day-

2016-what-happens-when-you-dont-have-clean-water-a6946026. html

• What are the impacts of water shortages?

• https://mashable.com/2016/03/22/water-crisis-how-to-help/#x7z0k1urAPq7

https://thewaterproject.org/why-water/poverty

• https://theconversation.com/some-remote-australiancommunities-have-drinking-water-for-only-nine-hours-aday-86933

RESOURCES FOR TEACHERS

• Accountable Discussions

• http://www.theteachertoolkit.com/index.php/tool/ accountable-discussions

• Accountable Talk Stems

https://educationcloset.com/wp-content/uploads/2015/09/

- AccountableTalk-Stems.pdf
- Fishbowl

• https://www.facinghistory.org/resource-library/teachingstrategies/fishbowl

• Engage Your Students with Fishbowl Discussions

• https://blog.teacherspayteachers.com/engage-your-studentswith-fishbowl-discussions/

• Elements of a Fishbowl Discussion

• https://www.youtube.com/watch?v=FaakCE0z1aQ&t=124s

• https://www.tes.com/lessons/h1wUBPQ6h1F8jQ/global-

goals-introduction

UN SUSTAINABLE DEVELOPMENT GOALS LINKS

https://www.un.org/sustainabledevelopment/cities/

https://www.un.org/sustainabledevelopment/peace-justice/

 https://www.un.org/sustainabledevelopment/es/water-andsanitation/

 https://www.un.org/sustainabledevelopment/water-andsanitation/

 https://www.tes.com/lessons/h1wUBPQ6h1F8jQ/globalgoals-introduction

GROUP NOTES

• Capacity and desire to mediate conflict

• Volunteer in programs that advocate for youth (community service).

> Ninth graders will begin to understand, through their own experience, the need, importance, and impact associated with community service and advocacy (so should we shape this to have something to do with urbanization and cities?)

• Recognizing and reporting signs of students struggling with mental health issues

- Upstander/bystander
- Learning how to take action within a school system
- Recognizing the NEEDS of a school community
- Making connections between local and global issues
- Fostering empathy skills

 Ninth graders will further develop and apply their empathy-building skills, then use them to understand the connections between empathy and justice.
Through exploring their own and their classmates' perspectives (through dialogue and stories, perhaps), they will recognize their different experiences of peace and justice.

• Recognize and identify systems that unequally distribute power and justice (local, national, international), in cities and other places.

> Ninth graders will know what a system is and be able to recognize local systems and perhaps others.

• Develop a tool kit allows students to ensure safety and rights of all community members

• Exercises civic rights and responsibilities that promote peace and justice

FOOD FOR THOUGHT

(not learning expectations for ninth graders)

• What are the systems that make cities sustainable and unsustainable? How could ninth graders come to recognize these systems?

• Are sustainable cities just and peaceful--how important is that to their sustainability?

Interesting challenge: if our ninth graders are in the first year of a new school, they may just be learning what systems operate in that new school--but they could interview older kids to learn about those kids' perceptions of the school's systems; kids who are the oldest kids in a "middle school" may be able to describe all the systems that have dictated the last few years of their school lives.

• How do different communities support the right for all people to access clean water?

• How do different cultures communicate the importance of maintaining clean and safe water for human consumption?

• How do individuals survive with limited access to clean water?

• What actions can we take to solve our water shortage problems?

Pick a quadrant(s) from a global approach:

- Q1: Investigate the World
- Q2: Recognize Perspectives
- Q3: Communicate Ideas
- Q4: Take Action

****How do different communities support access to clean water for all?

• Why do some communities not have access to clean water?

• What actions do people take when they have limited access to clean water?

• What actions can we take to solve our water shortage problems or what actions must we take to maintain access to clean water?

• What impacts does shortage of water have on quality of life?

• What is the cultural impact of water on a community?

Opener: painting/piece of art

Closing: Exit Slip -- How could you impact a water shortage?

