

Environmental Justice Ambassadors

PLANNING NOTES:

- 1) **Teams:** 4-5 students
- 2) **Length:** Approx. 5-7 classes
- 3) **Resources Needed:** Computers, Copies of student workbook

OVERVIEW:

The movement for environmental justice is all about PEOPLE (like you!) speaking up and taking action. The inequities in our environment that lead to health problems are ubiquitous. YOU have an opportunity to find an injustice and fix it. Your mission is to examine the environment in your community, state, or nation and figure out how it can be protected or change to help others live healthier. You are... Environmental Justice Ambassadors!

GOAL:

Identify an environmental justice issue and create an intervention to improve health.

ROLE:

You are a team of health professionals (you decide your roles!) working together to improve the environmental health of your community.

OBJECTIVE:

10.11: Use data to identify and address an environmental health problem.

DELIVERABLES:

- 1) Issue Paper
- 2) Intervention Presentation

ASSESSMENT:

Your paper and presentation will be graded on a rubric.

STANDARD:

NGSS (WHST.9-12.7) Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject demonstrating understanding of the subject under investigation. (HSL13)



Case Introduction:

This challenge is ENTIRELY yours to define. The only guidelines are that you must find an environmental justice issue to work on and come up with some intervention to address it. At the end of the case, you will communicate your issue and solution through a paper and presentation. Since this case is very open-ended, you must engage in excellent teamwork with your peers in order to be successful!

Teamwork:

Complete the table below to share information and decide upon roles (i.e. epidemiologist, health policy expert, physician, etc.). Then decide on team norms to help start your team off strong!

Team Member	Contact Information	Role

Team Norms:

We will...

- Examples:**
- Actively listen and respect others' point of view
 - Contribute equally
 - Communicate openly if you notice a problem or a weakness in teamwork
 - Respond to phone calls, texts, or emails about the project within 24 hours
 - Be solutions-oriented
 - Have fun, but work hard.

Identify Questions:

KNOW-NEED TO KNOW CHART:

Complete the Know-Need to Know chart below based on the following directions:

- **Know:** In this column, write any facts or information you already knew about environmental health or environmental justice issues in your community.
- **Need to Know:** In this column, write a list of QUESTIONS you have or things you want to find out or need to research.

Know	Need to Know

This is a simplified variant of the classic KWL chart. The "Know" column becomes a hybrid of what students already knew (or think they knew) and what they have learned from prior lessons. The "Learned" column is eliminated because students will complete the next step (background research and surveys) later in the case study.

**Use a separate sheet of paper to continue this chart!*

Setting up Interviews: The assets of the community and ability of instructor to offer options for interviews will be variable. Do what works! Some options include:

1. Have students use their resourcefulness to find a person to interview as a group. Model professional emails and behavior if this is a concern;
2. Create a bank of possible volunteer health professionals or community members for students to choose from. Let these individuals know ahead of time that students will reach out to set up interviews.
3. This portion of the case study could be skipped altogether or offered as an extra credit component.

Gather Information: INTERVIEW

GOALS:

1. Engage with community members OR health professionals to learn more about environmental health concerns in your area.
2. Determine one specific unmet need related to environmental health issues.

EXPECTATIONS:

Each team member will set up and conduct one interview. Before and during your interview, you will be expected to focus on the following skills:

- **CURIOSITY** Prepare and ask excellent questions.
- **INITIATIVE:** Take ownership of the interview. Find someone who will provide a unique or interesting perspective.
- **PROBLEM-SOLVING:** Identify problems related to environmental health by asking strategic questions and probing for information.
- **COMMUNICATION:** Be professional, engaged, and respectful in all of your interactions. Thank your interviewee immediately and later via card or email.

INTERVIEW INFORMATION:

Name of Interviewee: _____ Interview Date/Time: _____

Profession or Title (if applicable): _____

Type of Interview: *(Circle one)* IN-PERSON / PHONE / VIDEO CHAT / EMAIL*

**Email should only be used if other possibilities not available or feasible*

Phone Number: _____ Email: _____

Signature (Interviewee): _____ **Date:** _____

Q&A *(Prepare in advance; use separate sheet of paper if needed)*

A large, empty light blue rectangular area intended for students to prepare their questions and answers in advance.

Other Notes & Reflections

A large, empty light blue rectangular area intended for students to take other notes and reflections during the case study.

Identify the Problem:

What **problem** will your team focus on? (Be sure to be clear and specific--address the who, what, when, where, why, and how!)

Formulate a **research question**. (Take the problem and pose it as a question. An effective research question is relevant, rigorous, and probative!)

Writing a research question may be difficult. Provide examples if needed. Students will not be collecting a set of data to answer this question, although that step could be added to this case (See Module 6 Case - 6.12 for an example). Rather the purpose of the research question here is twofold: 1) for practice; 2) for helping teams identify whether their focus is narrow and precise enough. Poor example: How can we improve air quality? Better example: How is knowledge of sources of air pollution among parents associated with their level of community activism or advocacy regarding issues of environmental health?"

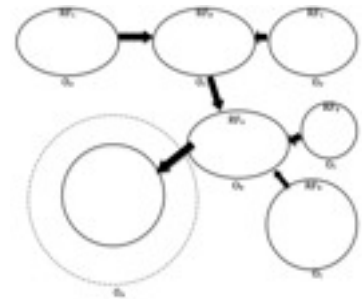
If students have NOT completed Module 3 (Lesson 3.11), provide a few examples of visual brainstorming tools (also known as concept webs, mind maps, etc.). Emphasize that there is no right or wrong, this is just a way to help brainstorm and think about a problem.

Explore the Problem:

IDENTIFYING NEEDS:

Factor Outcome Web:

A Factor-Outcome web is a tool used to show the relationship between risk or protective factors and associated outcomes, made by connecting variables with bubbles and arrows, pointed in the direction of hypothesized influence.



Create a Factor-Outcome web that connects factors and variables related to your environmental health problem. You may choose to organize this web in any way that makes the most sense to you; it should be a visual map to track your thinking!

Students might want to do a very brief pencil sketch of a part of their web in the empty space here. Then they could collaborate with team members and create a larger web on poster paper or butcher paper.

Types of Risk Factors are focused on in Lesson 5.5, if a refresher is needed!

RISK FACTORS:

Take notes on possible risk factors for the your environmental health problem in the table below.

Type of Risk Factor	Risk Factors
Predisposing	
Reinforcing	
Enabling	
Other Modifiable Risk Factors	
Other Unmodifiable Risk Factors	

Research:

All sources should be journal articles. Remind students to refer back to lesson 10.10 about searching on Google scholar.

LITERATURE REVIEW:

Each team member should choose a risk factor to focus on and locate one peer-reviewed, scholarly journal article describing a study related to that risk factor.

Info Type:	Information:
Source <i>(title, author, name of site, date, and URL below)</i>	
Risk Factor	
Purpose of Study	
Methods	
Results	
Conclusions	

IDENTIFY PRIORITIES:

What were the major findings from your literature review? Share your findings and record the key conclusions in the table below. Then work together to select the **one or two** most urgent risk factors to prioritize.

Major Research Findings:

Risk Factor	Literature Review Findings

Identify Solutions:

Review all of your notes and research findings. Discuss the information you gathered and select a risk factor or protective factor to focus on in order to prevent or reduce the environmental health problem you have chosen.

Write your factor-outcome focus area below:

Risk or Protective Factor:

Outcome:

Now you will propose a SMART intervention, aligned to your risk/protective factor.

Use the space below to brainstorm your intervention, then fill out the Intervention Proposal on the next page.

BRAINSTORM SPACE:

Intervention Proposal:

Risk/Protective Factor:

Name of Intervention:

Description:

How is this intervention SMART?

Specific:

Measurable:

Achievable (yet Ambitious!):

Relevant:

Time-bound:

How would your intervention be evaluated in order to determine how it worked and whether it was successful or not?

Intervention Execution:

Prepare an action plan to create the solution your proposed.

<p>Steps Needed to Create Intervention (List everything you need to do to get the intervention created.)</p>	
<p>Questions, Barriers, or Knowledge Gaps (Where will you get stuck? What do you need help with?)</p>	
<p>Resources Needed (What materials do you need?)</p>	
<p>Support Needed (Who might you need help from?)</p>	
<p>Action Plan (Assign tasks, owners, and deadlines for all action items)</p>	

Communicate:

If students need more structure or guidance, an outline can be created with basic requirements for each section. Or groups could be required to submit their own outline for feedback and/or approval before starting their draft!

PAPER:

Prepare a 2-3 page written report that includes the following:

- **Introduction to Problem**
- **Literature Review**
- **Recommendations/Intervention**
- **Works Cited**

Students can be required to submit only ONE paper per group (this will also make grading less cumbersome!) They should be encouraged to be very collaborative. (Many hands make light work!) Beware: Often, collaborative papers take LONGER and lead to unequal distribution of work. One strategy, if technology permits, is to require use of Google Docs. If they share with you, as the instructor you can check to see their progress and even revision history showing changes/additions that each team member made. If they know (or think!) you will be doing this ahead of time, any “slackers” may be more motivated to do their part!

Each team member should contribute to the report equally. Be sure to cite all your sources appropriately to avoid plagiarism!

PRESENTATION:

Prepare a 5 minute team oral presentation that includes the following:

- **Background on Problem**
- **Explanation of Risk Factors**
- **Summary of Research Findings**
- **Recommendations/Intervention**

Each team member should contribute to the presentation equally. Practice as a team to ensure you are professional, clear, concise, and engaging. Be sure to plan your opening and closing as well as transitions between team members.

To make presentations more authentic, community partners could be brought in to view and/or evaluate them, as well as ask questions of each group. These community partners could be drawn from the folks who helped during the case by being interviewed.

Alternatively, presentations could be recorded and uploaded to youtube (keep privacy settings as “unlisted” in order to protect student privacy). These videos could be shared with stakeholders. If students know this in advance, they may be more invested (and nervous, in a good way!) to do their best and feel that their research and contributions will actually be received from those who may be able to take action!

Rubric:

The rubric serves as a basic template and can be modified and tailored as needed to individual instructor needs and grading policies/criteria.

Your survey, final report, and final presentation will be evaluated using the criteria below.

Obj. 10.11: Use data to identify and address an environmental health problem.				
	Needs Improvement	Emerging Mastery	Partial Mastery	Mastery
QUALITY OF INTERVENTION	Achieved 0 of 3 factors: 1) Creative & original; 2) Aligned to one or more risk factors; 3) Meets SMART criteria and has a logical evaluation plan	Achieved 1 of 3 factors: 1) Creative & original; 2) Aligned to one or more risk factors; 3) Meets SMART criteria and has a logical evaluation plan	Achieved 2 of 3 factors: 1) Creative & original; 2) Aligned to one or more risk factors; 3) Meets SMART criteria and has a logical evaluation plan	Achieved 3 of 3 factors: 1) Creative & original; 2) Aligned to one or more risk factors; 3) Meets SMART criteria and has a logical evaluation plan
PRESENTATION	Missing presentation or underprepared; Not concise, clear, & aligned; unprofessional.	Not concise, clear, & aligned; unprofessional opening, closing, & transitions; one or more team members did not contribute	Concise, clear, & aligned; professional at most points; fairly smooth opening, closing, & transitions; all team members contributed, but some more than others.	Concise, clear, & aligned; professional; smooth opening, closing, & transitions; all team members contributed.
ACCESSIBILITY OF INFORMATION	Achieved 0 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional	Achieved 1 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional	Achieved 2 of 3 factors: 1) Clear and easy to understand information 2) User-friendly 3) Neat and professional	Achieved 3 of 3 factors: 1) Clear and easy to understand information 2) User-friendly; 3) Neat and professional
WRITING	Many spelling, grammar, and vocabulary errors.	Some spelling, grammar, & vocabulary errors.	Very few spelling, grammar, and vocabulary errors.	Easily read & understood; almost perfect grammar, spelling & vocabulary