

# Environmental Justice Curriculum

## Introduction

Environmental justice (EJ) concepts were in use long before the “official” birth of the movement in the 1980s. Native Americans have always lived in harmony with nature and hold environmental justice in high regard. That nature can live without us, but we cannot live without nature is a truth that has always been understood by the tribes. However, we live in an extractive economy that grows by extracting and depleting natural resources, which in turn forces individuals to overlook the intricate relationship between humans and nature. Recent scientific research revealed that humans have impacted the planet to a point where it can no longer regenerate. Still, there is hope; organizations and community collectives are imagining a new reality to heal our planet and to stop negative human impacts. This new reality is being pushed by new ideas to combat our current extractive economy. One of these frames is the *Just Transition Frame*. This frame is defined as:

“[...] a vision-led, unifying, and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy. This means approaching production and consumption cycles holistically and waste-free. The transition itself must be just and equitable; redressing past harms and creating new relationships of power for the future through reparations. If the process of transition is not just, the outcome will never be. Just Transition describes both where we are going and how we get there.”

This frame is being used by unions, labor and social movement organizations, and environmentalists, among others. It has also been used by the environmental justice movement to design an alternative non-extractive reality. Unfortunately, people are so immersed in our current state that imagining a new reality can be a daunting task. We have created this curriculum to provide a basic understanding for those looking to engage with people using the environmental justice framework in their projects.

## Who is this curriculum for?

This curriculum is intended to be used by people who are not familiar with environmental justice concepts or are not working in a community setting. Ideally, the lessons and workshops included here are designed to reach young adults from diverse background. Since we want to validate everyone’s experience and knowledge, it is important for the facilitator to find out what the participants already know about the issues prior to any of the activities. This way we can minimize the “banking” educational approach.

## Objectives

- Create a basic understanding of what environmental justice is, and what the different avenues between those who see environmental justice as an outcome vs. those who see it as a process are
- Understand the connection between health and environmental justice

- Explore how ancestral knowledge can be inserted into current understandings of environmental justice
- Translate environmental justice into action
- Understand the current state of environmental justice and how it connects with environmental justice issues on a global scale

### **Lesson 1. Introduction to Environmental Justice**

In this section participants will develop a basic understanding of environmental justice based on the materials and discussions with diverse audiences.

#### **Objective**

- Provide a historical context to understand how the environmental justice movement started
- Identify key players in the creation of the environmental justice movement
- Understand how different sectors define environmental justice and what the implications of each definition are

#### **Activities**

1. We will present a short set of films that define environmental justice.
  - a. After presenting this short film, the facilitator will have a discussion with individuals to problematize the different understandings of EJ.
  - b. Participants will answer the following questions:
    - i. How do the definitions of environmental justice vary and what might the potential reasons for these different definitions be?
    - ii. What do you think are the implications of defining environmental justice in different ways?
    - iii. Which is the best definition of environmental justice and why?

#### **Reading List and Videos**

- [Mayah's Lot](#) (7 min film)
- NRDC, "The Environmental Justice Movement"
- William J. Clinton: "Memorandum on Environmental Justice," February 11, 1994. Online by Gerhard Peters and John T. Woolley, The American Presidency Project
- "The Road to Executive Order 12898 on Environmental Justice" 3-min film
- Executive Order 12898 on February 11, 1994. The President: "Federal Actions to Address Environmental Justice in Minority and Low-Income Population"
- Principles of Environmental Justice," Proceedings of the First National People of Color Leadership Summit"

### **Lesson 2. Environmental Justice Evolution**

In order to understand how the environmental justice movement has changed over time, we need to understand its evolution. This section unravels the evolution of environmental justice.

## Objectives

- Familiarize with environmental issues in the United States
- Familiarize with the [Warren County case](#) (North Carolina)
- Explore how different tribes of Native Americans understand environmental justice (and how the future of the environmental justice movement looks)

## Activities

1. For this section students will do the readings and watch the video on their own. This section will serve as an intermediate step for the next section (ice breaker).
  - a. Question to be answered by participants:
    - i. Has environmental justice really improved? (why/why not)
    - ii. Have we achieved environmental justice today?
    - iii. Is the environmental justice movement in crisis?

## Reading List and Videos

- Environmental Justice [Timeline](#) (EPA)
- Environmental Justice Timeline and Milestones from 1964–2014
- Native Americans: Where in Environmental Justice Research? ([Jamie Vickery](#) and [Lori M. Hunter](#))
- What is [Indigenous Environmental Justice](#) (video)
- Pro Publica “A brief history of environmental justice” ([video](#))

## Lesson 3. Environmental Justice in the World

While environmental justice issues are specific to their context, we cannot detach them from their international implications and connections to global markets and interests. Thus, this section presents the connection between local environmental issues and their implication at the global scale and vice-versa.

## Objectives

- Understand how the local context is connected to environmental justice issues globally
- Contextualize how environmental justice is connected to an extractive economy
- Explore how the environmental justice movement can be used as a collective response to address environmental issues globally

## Activity

1. The facilitator will lead a discussion to contextualize and analyze environmental issues globally.
2. Participants will address the following questions:
  - a. What is the connection between local and global environmental justice issues?
  - b. What are some common factors between environmental issues globally?
  - c. How can local environmental issues help solve international justice problems?

- d. How can we create a common understanding of environmental issues around the globe?

### Readings and Videos

3. [“Mother Earth law to protect Bolivia forests”](#) by Al Jazeera English
4. [The UN-Conference on the Human Environment](#)
5. [The world’s top 10 battle for environmental justice](#)
6. [International Environmental Justice: Building the Natural Assets of the World’s Poor](#)

### Lesson 4. Reflection on Environmental Justice (Ice breaker)

To foster environmental justice practices, this section creates space for participants to engage with each other to problematize how they view EJ and to discuss what is at stake if we do not address those issues.

### Objectives

- Understand how environmental justice relates to health and social justice
- Uncover how environmental justice plays out in the real world

### Activity

- Engaging with participants: Environmental Justice Pictionary (inspired by the guessing word game). Participants will have the opportunity to guess key EJ concepts that will guide the workshop’s discussion. The idea is to start with easy concepts, then move on to incrementally more complex ones.
  - Game Rules (**5 minutes**)
  - How to win: You win as a group, not as individuals. Your group is successful when you guess the word or concept that your chosen teammate draws in silence.
  - One participant will be the custodian of the word deck. Each word will be numbered to ensure level of difficulty. Custodians should start with the card labelled “#1”.
  - Four participants will get an opportunity to draw a word from the deck. Only the custodian and the person drawing will get to see the word.
  - Each player will have one minute to draw, and the rest of the group has to guess what the drawing means within that time frame.
  - Any clarifying questions about the game rules before we begin?
- Guessing time (**15 minutes**)
- Group discussion (**15 minutes**)
  - After all words have been revealed, the group will spend the rest of the time in discussion.
  - Name the environmental resource (topic) that your group’s word-pictures focus on.
  - We also think of environmental resources as different parts of the web of life. Humans and other animals are also part of that web.
    - i. Have you ever heard or seen these concepts?

ii. Can you think about an example of an environmental threat regarding your resource?

- Transition/connect to social equity: Looking at your group’s list of environmental threats, encircle the ones that are happening today in ways or in places that also have an unfair impact on low-income communities, people of color, indigenous communities, immigrants, and elderly populations.
- Discussion: Environmental justice is work we can do together to stop the environmental threats that hit our communities the hardest *and* to reimagine and create a world in which all communities have what they need to thrive in ways that allows them to promote and protect bio-cultural diversity.
- Pose “harvest” questions (based on the words your group encircled):
  - What stands out?
  - What surprises?
  - What are the patterns?
  - What’s missing?

Typology	Groups 1 & 5	Groups 2 & 6	Groups 3 & 7	Groups 4 & 8
Level 1 (environmental resource)	<b>Air</b>	<b>Water</b>	<b>Parks</b>	<b>Food</b>
Level 2 (threats to environmental resource)	<b>Air Contaminant</b> (e.g. gas, smog)	<b>Water pollution</b> (e.g. nutrients, <i>E. coli</i> , oil, garbage)	<b>Ground pollutants</b> (e.g. garbage, lead, mercury)	<b>Pesticides</b> (e.g. chemicals, fertilizers, animal repellent)
Level 3 (disparate access to the environmental resource)	<b>Breathing clean air</b>	<b>Access to clean water</b> (e.g. swimming in the beach, river, lake)	<b>Access to nature</b> (e.g. hiking, sitting below a tree, etc.)	<b>Access to healthy food</b> (e.g. eating healthy food at reasonable prices)
Level 4 (equitable access & balance)	<b>Environmental equity</b> (e.g. Laws, practices, values that contribute to clean air)	<b>Environmental equity</b> (e.g. Laws, practices, values that contribute to clean water)	<b>Environmental equity</b> (e.g. Laws, practices, values that contribute to clean green spaces)	<b>Environmental equity</b> (e.g. Laws, practices, values that contribute to eating healthy)

- Final discussion and reflection (**160 minutes**)
  - Reflection (whole group, 11 min.):

- Share essential insights from each group: What stood out to you? Which part of the web of life did your group focus on first? Based on your discussions, what would you say is an essential insight?
- Each group shares for up to 60 seconds (1 min. x 6 groups = 6 min.)
- “What can we do to address the EJ issues we have identified?”; “What is happening now to address these issues?” (5 min.)

## **Videos and Readings**

- Environmental Justice Explained ([video](#))
  - For this section we are not including more resources, as we want EJ issues to emerge naturally from the discussion.

## **Lesson 5. Knowing and Mapping the Community**

To situate participants in the physical space where communities are located, this lesson provides an activity to problematize the challenges and advantages of analyzing communities using a map.

### **Objectives**

- Familiarize with mapping tools (ArcGIS and Google Earth)
- Learn participatory mapping techniques
- Learn how to identify potential community vulnerabilities using a map

### **Activity (60 minutes)**

1. Drawing from the reading, the organizer will facilitate a discussion on participatory mapping and some advantages/disadvantages of using this technique.
2. After the discussion, the facilitator will bring out an aerial map of the community to engage with the following items:
  - a. Identify the community
  - b. Draw the borders of the community
  - c. Identify key landmarks of the community (church, schools, hospitals)
  - d. Identify potential pollutant sources (participants should have learned this from the previous three lessons)

### **Reading List and Videos**

- Participatory Mapping ([video](#))
- Actua’s community mapping ([video](#))
- Kids, Kale, and Concrete: Using Participatory Technology to Transform an Urban American Food Desert (Antwi A. Akom, Aekta Shah, and Aaron Nakai)
- Dennis, S.F., Jr., Gaulocher, S., Carpiano, R.M., & Brown, D. (2009). Participatory photo mapping (PPM): Exploring an integrated method for health and place research with young people. *Health & Place*, 15(2), 466-473.

## **Lesson 6. Identifying Environmental Justice Issues**

Not only is it important for participants to understand environmental justice issues and concepts, but they also need to be able to apply them in real world scenarios. This section has two types of activities. Activity **A** is designed to be conducted if the community and project are located in the same geographical space, while activity **B** is intended to be completed if there is no congruence between project and community.

**Objectives**

- Problematize how sometimes environmental justice issues are “invisible”
- Learn to identify environmental problems

**Activity (A)**

**Activity (B)**

<ol style="list-style-type: none"> <li>1. Participant will meet the community members who will guide them around the community (180 minutes).</li> <li>2. Participants will walk through the community with their guides and will identify what the environmental justice issues are in the community.</li> <li>3. Participants will construct how these issues can vary from the exercise they conduct with the map.             <ol style="list-style-type: none"> <li>a. By walking through the community, participants will gain a clearer idea of how the community looks, what the key issues are, and how these issues affect their everyday lives.</li> </ol> </li> </ol>	<p>In a classroom setting, the community member and participants will engage in conversations to:</p> <ol style="list-style-type: none"> <li>1. deconstruct myths about communities</li> <li>2. talk about the history of the community and the implications of that history</li> <li>3. problematize what the community member’s definition of community is, and what the key components of this definition are</li> </ol>
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**Readings and Materials**

- [Environmental Justice in your community](#)
- [Environmental Justice Toolkit](#)
- [Oakland for the Living](#)
- Aerial Map of the community
- Pencils, Pens, Markers

**Lesson 7. Imagining a New Reality**

Now that participants know how environmental justice issues originate and take place in the world, they are invited to imagine a new reality. In this section, participants will define what would need to change to better their world. This is in preparation for the next section, designing an action plan.

## Objectives

- Define our current economy
  - What is an extractive economy?
- Problematize the forces shaping this economy
- Propose and define a regenerative economy

## Activity

1. In this section, the facilitator will guide participants to identify different ways to create a less extractive economy.
2. Taking sheets of color paper, students will draw or write what would need to change, or how do they think this change could be possible. Participants should be encouraged to discuss their thoughts and opinions as a group.
3. After participants are done writing and/or drawing, the facilitator will guide them through a short discussion to see if there are any key patterns that emerge.

## Readings and Videos

- Pathways to Resilience: Transforming Cities in a Changing Climate
- Community-Driven Climate Resilience Planning: A Framework
- [We Live in an Extractive Economy, But Can We Make it Better?](#)
- <http://www.no-burn.org/the-extractive-economy/>

## Lesson 8. Designating an Action Plan

This lesson is focused on how to create partnerships with community partners from a non-extractive perspective. This way we can engage in true cooperation between community members and allies.

## Objectives

- Develop an action plan with the community
- Establish the parameters for collaboration (recognizing collective liberation)
  - To familiarize yourselves with collective liberation, you may read about it on [PeopleandPlanet.org](http://PeopleandPlanet.org).
- Sign the memorandum of understanding with the community

## Activity

1. Participants will develop an understanding on what activities they would like to collaborate on with the community.
2. Collaborators will meet with community members to do a short presentation on what the collaboration could look like.
3. Once the collaborators and community members come to an agreement, both parties will sign an MOU (memorandum of understanding).



## Readings and Resources

- [Sample Memorandum of understanding with grassroots community organization](#)
- Student Leadership Institute for Climate Resilience
- Brown, A. (2017). Emergent Strategy: shaping change, changing worlds. Chico, CA : AK Press
- Solidarity frame ([Just Transition](#))

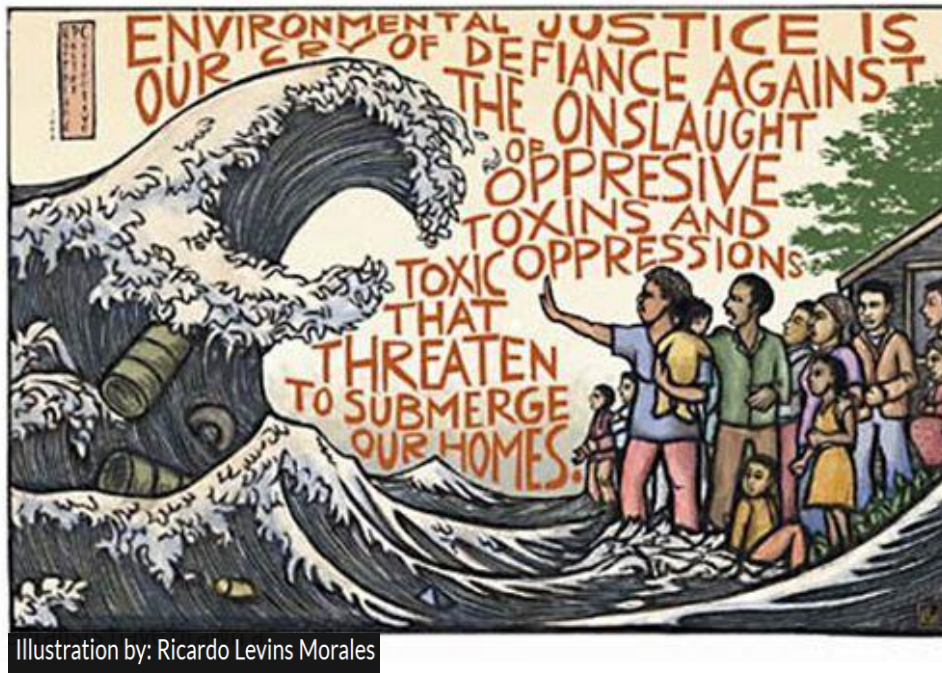
## Evaluation

Facilitator will give participants an evaluation sheet to observe whether the core objectives were completed and followed (making the facilitator accountable).

## Final Remarks

We have created 8 lessons to help us understand environmental justice in our current economic context. We present these lessons as a work in progress and not as a fixed plan. While we comprehend there are commonalities between environmental justice issues, we also understand each community faces environmental justice differently, relevant to their context. We have also created an Appendix in which we present a combination of the best and most relevant curricula on environmental justice.

In the spirit of cooperation, we have created this document for allies who want to engage with communities involved in environmental justice.



## Appendix 1

### Environmental Justice curricula and lesson plans

<a href="#"><u>Just Health Action advocates</u></a> √√	<a href="#"><u>Asian Pacific Environmental Network</u></a> √	<a href="#"><u>Learners to Leaders, Groundwork USA's new environmental justice literacy curriculum</u></a> √√√	<a href="#"><u>National Institute of Environmental Health Sciences</u></a> √√√√	<a href="#"><u>InTeGrate (interdisciplinary Teaching about Earth for a Sustainable Future)</u></a>
<b>Objectives &amp; Modules</b> 1. Part one teaches the SDOH within a paradigm which understands health as a human right (Knowledge). 2. Part two is composed of activities that help students find their own direction as agents of social change (Compass). 3. Part three teaches students specific strategies and advocacy tools to act on the SDOH (Tools). 4. Part four helps students develop and	<b>Objectives</b> 1. Basic introduction to EJ concepts and language. 2. Identify the connection between a healthy home environment and EJ. 3. Explore the connection between current community concerns with EJ.	<b>Objectives</b> 1. Define environmental justice (EJ) in their own words. 2. Describe historical and contemporary EJ events. 3. Demonstrate basic understanding of EJ risk factors in their home communities. 4. Acquire knowledge of government and community-based organizations and resources addressing those risk factors. 5. Identify and address a local issue through research,	<b>Modules</b> 1. The history of the environmental justice movement 2. The impact of this movement on public policy 3. The connection between race/class and environmental hazards 4. The economic, environmental, and health benefits of training people of color in environmental careers; and 5. A review the major accomplishments of the environmental justice movement	<b>Objectives</b> 1. Enable students to identify the freshwater components of the hydrologic cycle and connect them to the basic need of all human beings for equal access to clean freshwater. 2. Frame water science within theories of environmental justice defined by the EPA.

implement a specific action intended to increase health equity by addressing the SDOH (Action).		campaigning, or other action. 6. Connect global issues with neighborhood-level ones.		
Lesson Plan 1: What makes your community healthy/unhealthy	1. Intro to Training	1. Introduction: Demonstrating Unfairness (Group Discussion: <a href="#">Mayah's Lot</a> )	Lesson 1: Two Decades of Environmental Justice	Unit 1. Introduction to Environmental Justice
Lesson Plan 2? Whose Backyard? Toxic Waste Meeting	2. Ice Breaker	2. Ice Breaker (Balloon Wars: Limited Resources Game)	Lesson 2: Major Studies and Finding	Unit 2. The Hydrologic Cycle and Freshwater Resources
Lesson Pan 3: Equality vs. Equity	3. What is Environmental Justice	3. Mini EJ Exhibition (2 laptops with EJ Memorandum on EJ and EJ Order 12898)	Lesson 3: Race, Class, and Environmental Justice	Unit 3. Streams and Water Diversion
Lesson Plan 4. Causes of the Causes: What are the root causes of the problem?	4. Game (learning about toxicity)	4. Environmental Justice Timeline Activity (How people organize to come up with a solution); Honoring experience; focus on the local community	Lesson 4: The Changing Face of the Environmental Industry	Unit 4. Women and Water
Lesson Plan 5. Mapping Environmental (In)Justice	5. Small Group Activity (Mapping Community Problems)	5. Worksheet (what is the local neighborhood we are focusing on; what are the EJ issues of this community, etc.)	Lesson 5: Winning with Environmental Justice	Unit 5. Hazardous Waste and Love Canal

Lesson Plan 6: Cumulative Impact Analysis Results	6. Report Back (What are some similarities between communities?)	6. Taking Action (What do we need to know about this neighborhood and how we do find out?)		6. Groundwater Availability and Resources
Lesson Plan 7-8: Green Infrastructure – What is it and what is the equity issue with it?	7. What kind of community do we want?	7.Site Visit and Survey (Using the scientific method to document with a camera or phone)		
Action	Evaluation	8. Idea Map and Plan of Action		
		9. Environmental Justice Issues		
		10. Student Learning and Program Evaluation		