

SUSTAINABILITY TEACHERS' ACADEMY LESSON PLAN

BYOEC: Build Your Own Equitable City

Topics Covered

Sustainability
Environmental Racism
Urban Planning and
Development

Grades

7-12

Duration

45 Minutes

Sustainability

Competencies

Values Thinking
Collaborative Thinking
Strategic Thinking
Future Thinking

Online Resources

[Building Equitable Cities in an Urban Nation \(Panel Discussion\)](#)
[Living in a poor neighborhood changes everything about your life](#)

Acknowledgments

[GreenAction: Environmental Justice and Environmental Racism Homes For All](#)

Key Questions

How can we meaningfully combat the current racial divide in America using urban planning and policy? Why are African Americans environmentally disenfranchised in America? How is the placement of urban infrastructure related to environmental racism?

Overview

In this activity students will use prior knowledge, critical thinking and online resources to build a solution to redlining by developing their own equitable city. They will follow a loose framework delegated by the teacher.

Objectives

Students will be able to:

- Design the layout of a city as its population increases.
- Explain the intended parameters and population demographics of their newly-designed city, intentionally seeking to not marginalize any citizens.
- Critique the layout of their newly-designed city using an environmental racism lens.

Materials

Per Student or working group:

Notebooks

Large white pieces of paper

Markers/crayons/colored pencils

Printouts of GreenAction: Environmental Justice and Environmental Racism article

Technology

Teacher Preparation

Print out GreenAction: Environmental Justice and Environmental Racism articles. Print out "Building An Equitable City: Teacher's Script."

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Background Information

The way a city is planned out is dependent upon the population growth of a city. Citizens may be unintentionally marginalized due to redlining. Redlining leads to environmental racism because, as minorities are pushed further into neighborhoods, less money is spent on those neighborhoods because financial capital is best gained in areas of higher wealth. This leads to environmental inequalities among neighborhoods within cities and towns. More parks are created in wealthy areas, and areas with lower socioeconomic status are more commonly situated closer to dumps and sewage facilities.

Recommended Procedures

- 1. Engagement: Students will define “equitable” with their group partners using prior knowledge, and assign their urban area a name. (5 mins)**
- 2. Exploration: Students will draw a city development in stages, adding urban resources and infrastructure as dictated by the “Building An Equitable City: Teacher’s Script.” Teacher will read from the script. (20 mins)**
- 3. Explanation: Students will popcorn read the “Environmental Racism” section in GreenAction’s Environmental Racism and Environmental Justice webpage. (10 mins)**
- 4. Elaboration: Students will attempt to synthesize underlying environmental racism within their “equitable” city and reason why they were/weren’t successful in building an “equitable” city. (10 mins)**
- 5. Evaluation: Students will ideate how they and urban developers could better plan an “equitable” city. (5 mins)**

Extensions

Students can advocate for renter’s rights by getting involved in the Right to City’s Homes For All campaign, which are pushing for “affordable, community controlled homes.”

Students can further develop their vision for their equitable city by writing environmental policy and/or housing policy that lessens the history of discrimination within urban housing and development.

Vocabulary

- **Equitable:** fair and impartial
- **Urban Planning:** the study or profession dealing with the growth and functioning of cities and towns, including environmental concerns, zoning, infrastructure, etc.
- **Environmental Racism:** the placement of low-income or minority communities in the proximity of environmentally hazardous/degraded environments, such as toxic waste, pollution and urban decay

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- **Policy:** course or principle of action adopted/proposed by a government, party, business or individual
- **Infrastructure:** basic physical and organizational structures and facilities (i.e. buildings, roads and power supplies) needed for the operation of a society or enterprise

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Next Generation Science Standards

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Asking Questions and Defining Problems	ESS3.A: Natural Resources	Systems and system models
Engaging in Argument from Evidence	ESS3.C: Human Impacts on Earth Systems	
Developing and using models		

Common Core English Language Arts

Reading: Informational Text	Writing	Speaking & Listening	Language
		SL.6.1, SL.6.4, SL.7.1, SL.7.4, SL.8.1, SL.8.4	

Common Core Mathematics

6 through 8	9 and 10
N/A	N/A

Other Common Core

Science	History/Social Studies
CCSS.ELA-LITERACY.RST.6-8.1 CCSS.ELA-LITERACY.RST.6-8.4 CCSS.ELA-LITERACY.RST.6-8.7	CCSS.ELA-LITERACY.RH.6-8.1 CCSS.ELA-LITERACY.RH.6-8.4 CCSS.ELA-LITERACY.RH.6-8.7