

Sustainability Teachers' Academy Lesson Plan

Envision a Sustainable Neighborhood

Topics Covered

Sustainability
Happiness
Urban Systems

Grades

6-8

Duration

55 Minutes

Sustainability Competencies

Values Thinking
Future Thinking
Systems Thinking

Key Questions

How can a more sustainable neighborhood improve your happiness? What are components of a sustainable neighborhood? How does creating a vision of the future help us in achieving that vision?

Overview

Students will think about their neighborhood and how their neighborhood would score on the sustainable neighborhood for happiness index (done in the previous lesson). They do not have to evaluate their neighborhood but they should be able to reference the components that are part of the index. Once they have thought about their neighborhood in terms of what they like about it, and what they would like to improve, they should begin to construct a narrative about the life of a person in their neighborhood—how do they commute, where do they do grocery shopping, what do they see out of their window, do they participate in neighborhood decision-making? Once they have created a narrative based on the current state of their neighborhood, they should begin to envision what their future desired state would be. They should create a vision board that represents components they would like to see in their neighborhood in order to make it more sustainable and improve the happiness of the residents in it.

Objectives

Students will be able to:

- Describe components of their neighborhood that impact the sustainability and happiness of its residents
- Construct a vision of their neighborhood in the future based on making the neighborhood more sustainable and making the residents happier
- Communicate how features of a neighborhood can positively and negatively impact the environment, economy, and society

Materials

Per student

- T Chart/Narrative Worksheet
- Vision Worksheet
- 15 to 20 inches of yarn or string
- Tape or staples/stapler

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Teacher Preparation

For each student, print one copy of each worksheet. Cut yarn or string to size, and collect and organize other materials.

Background Information

This lesson should follow the Sustainable Neighborhoods for Happiness lesson. Students should already be familiar with general sustainability topics including the “three pillars” of sustainability, urban systems, and city design and planning.

Recommended Procedures

Day One

Allows students a few minutes to create a sketch of their personal neighborhoods on the worksheet. When finished, students should complete the T-Chart to categorize components of their neighborhood as “What I like” or “What I want to improve”. Examples can include any part of the student’s neighborhood, from nearby parks, shaded sidewalks, to the presence of litter or light pollution.

Next, students will create a “Day in the Life” narrative for a typical resident of the neighborhood. This narrative should provide a detailed look at what it’s like to live in the respective community, that is, how would a resident experience the benefits that the neighborhood provides, and react to the areas that need improvement? Descriptions for the narrative should be based on the information collected using the T-Chart.

If time permits, allow students to share their neighborhood sketches, Tcharts, and narrative with their peers.

Day Two

Ask students to imagine what they would like their neighborhood to look like 20 years from now. Encourage them to consider the T-chart they completed yesterday. Their vision for the future of their neighborhood should include improvements to areas of need identified on their T-chart, or even ideas that would make what they like about their neighborhood now even better in the future.

On their vision worksheet, students should create a detailed drawing of their vision of what they want their future neighborhood to be like. Their goal is to imagine a more sustainable and happier place to live for everyone in their community. Next, students should use the yarn or string to connect the narrative created on day one to their drawing of their desired future neighborhood.

Students should think about what needs to happen in the next 20 years to make their vision for the future of the neighborhood come true. Encourage them to think about and identify specific steps or processes that need to happen. Examples might include planting shade trees, improving lighting, or installing solar panels on every home. Each step or process should be recorded on a post-it note or piece of scrap paper. Attach each piece of paper to the yarn or string that connects the neighborhood narrative to the future neighborhood. Students should attempt to place the steps or processes into a chronological order if possible. If some of the steps written on the post-it notes are too broad or general, students will need to come up with the smaller

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steps to bridge the gaps in the development of the future neighborhood. Their goal is to create a timeline that bridges the gap between the present and future states of their neighborhood, and represents a plan of action for the next 20 years.

When finished, students should share their vision of their future neighborhood and their plan with their peers.

Vocabulary

Sustainability: The ability to meet the needs of the present without compromising the ability of future generations to meet their needs

Happiness: A state of emotional and physical well-being

Neighborhood: A single region or area that forms a community within a city or town

References

Cloutier, S., Jambeck, J., & Scott, N. (2014). The Sustainable Neighborhoods for Happiness Index (SNHI): A metric for assessing a community's sustainability and potential influence on happiness. *Ecological Indicators*, 40, 147-152.

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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
Developing and using models	ESS3.C Human impacts on Earth systems	
Obtaining, evaluating, and communicating information	LS2.C Ecosystem, dynamics, functioning, and resilience	

Common Core English Language Arts

Reading: Informational Text	Writing	Speaking & Listening	Language
RI. 6.7, RI.7.7, RI.8.7	W.6.3, W.7.3, W.8.3	SL.6.1, SL.6.2, SL.6.4, SL.7.1, SL.7.2, SL.7.4, SL.8.1, SL.8.2, SL.8.4	L.6.1, L.6.2, L.6.3, L.6.4, L.7.1, L.7.2, L.7.3, L.7.4, L.8.1, L.8.2, L.8.3, L.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.6-8.4	CCSS.ELA-LITERACY.RH.6-8.4