

(Mapping Knowledge of Hazards, Vulnerabilities and Resilience)

Lesson Overview: Students take on the identity of investigative reporters as they analyze their neighborhood for vulnerabilities, potential hazards and resilience. They show their findings by creating a map.

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Subject(s): Social Studies and Language Arts

Suggested Grade Level(s): 3 - 9

Time Duration: 5 40-45 minute class periods

[CCSS.ELA-Literacy.SL.5.4](#) Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

[CCSS.ELA-Literacy.CCRA.R.7](#) Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Objectives:

- Students will **observe** the neighborhood ecosystem and infer possible hazards.
- Students will **analyze** neighborhood infrastructure to determine potential vulnerabilities.
- Students will **synthesize** information gathered from neighborhood sources to determine how resilient the people are.

Materials:

- Fleischman, Paul [Seedfolks](#) – a short novel where each chapter is told from the point of view of a different person living in a neighborhood. Themes of community, resilience, racism, conflict, cooperation
- Neighborhood Survey Sample Questions – a selection of sample questions that can be modified by the student to fit their project

Activities and Procedures:

Day 1	<p>Taking on the identity and planning</p> <p><i>As investigative reporters your students are tasked with uncovering the positive and negative aspects of their neighborhoods. You as the teacher are the editor of the newspaper or the executive producer of the TV program their working for. Set the task before them as a challenge. Learn all you can about your neighborhood and put this information in a useful map.</i></p> <p><i>Before students begin their work they must have a working understanding of Hazard, Resilience, and Vulnerability. Kathleen Tierney’s resource 1 provides a chart of possible vulnerabilities to start from. Hazards are any part of the ecosystem, infrastructure or an institution that pose a threat to life. Vulnerabilities are qualities of people, institutions or infrastructure that increase that threat. Resilience on the other hand is the capability and potential of people to overcome hazards – resilience can be based in either people or institutions or both.</i></p> <p><i>Consider showing a selection from “Naturalizing Disaster: Nature Vulnerability and Social History,” a lecture by Mark Lycett) and “Social Science Research on Hazards and Disasters: Topics, Concepts, and Resources,” a lecture by Kathleen Tierney. See also the additional materials provided for the Tierney lecture, Resource 1 and 2)</i></p>
Day 2	<p>Data gathering and analysis</p> <p>During this day students will need to access the internet and possibly be taken on a neighborhood tour of the area immediately surrounding the school. Consider employing Google street view (maps.google.com) if leaving the school grounds proves to be a challenge.</p>
Day 3	<p>Synthesis</p> <p>Before students create maps to show what they learned and observed, take a day to have students share their findings in small groups of 4-5 students. Assign the groups with the task of comparing and contrasting their findings. Use this time as a formative assessment of student language in their discussions as well as their research.</p>
Day 4	<p>Mapping Local Knowledge Day 1</p> <p>Provide students with large sheets of butcher paper on which they will draw their maps. Show examples of informational maps. Identify key components of maps (title, color scheme, key). Consider sharing this great collection of maps to inspire your students. (LINK – 40 Maps)</p>
Day 5	<p>Mapping Local Knowledge Day 2</p>

Assessments:

- Performance Task during days 4-5 students will create a map of their local area noting the hazards, vulnerabilities and possible points of resilience in their area. Use this map to assess students understanding.
- Create a rubric to assess the final map created. Modify the below rubric to fit the level of your class.

	D	C	B	A
Understanding Hazards, Vulnerabilities and Resilience	Attempts to show understanding of Hazards, Vulnerabilities and Resilience in the map	Shows limited understanding of Hazards, Vulnerabilities and Resilience in the map	Shows understanding of Hazards, Vulnerabilities and Resilience in the map	Consistently shows deep understanding of Hazards, Vulnerabilities and Resilience and their interconnections in the map
Mapping Skills	Map is challenging to read. Not all aspects of research are pictured	Some parts of the map are easy to understand. Some aspects of research are pictured.	Map is mostly easy to understand. Clearly communicates information from research.	Map uses appropriate key and scale, while engaging the viewer Clearly communicates the information

Adaptations:

If for whatever reason you're having trouble with students getting information about their own neighborhoods, you can use the *Seedfolks* neighborhood as your topic instead. Have students create a map of the imaginary neighborhood in the story. Have them analyze that neighborhood instead. Have them conduct mock interviews of different characters in the story using the template.

Leaving the school can be challenging. Google Street View (maps.google.com) and a computer with internet access can offer a virtual tour of the area. Simply input the address and zoom in until you are at street level.

Extra Credit/Additional Resources:

For extra credit you can challenge students to create a video tour of the neighborhood using Google street view and screen capture software (Quick Time is one free example). The tour can further elaborate on the neighborhoods hazards, resilience, and vulnerabilities