Flooding! 5E Lesson Plan

2. Subject area / course / grade level: Reading, Writing, Science 3& 4th Grade

3. Materials List: computers, pencils, outside items like twigs, rocks, exit slip, vocab cards 4. Overarching TEKS, <u>ELPS</u>, <u>CCRS</u>, and Global Graduate/other district standards (chart or list).

TEK	CCRS	ELPS	Other
3.7A The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (A) describe personal connections to a variety of sources, including self-selected texts	Integrate and organize material effectively	Listening	<i>Critical</i> <i>Thinking</i>
4.2F communicate valid oral and written results supported by data.	Participate actively, effectively, and respectfully in one-on-one oral communication as well as in group discussions.	Speaking	Skilled communic ators
	Generate ideas, gather information, and manage evidence relevant to the	Writing	

	topic and purpose.		
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5. Lesson Objective/Summary:

Students will be able to identify key problems of different disasters like floods and drought. Students will be able to develop solutions to help people during a flood or a drought. Students will be able to understand the differences between floods and droughts most importantly because those are the disasters we get here in Houston.

7. Community-Based Resources:

- A. How can you incorporate a local community member? Expose students to different careers, with people that look like them, in Houston. Find a list of organizations through the <u>Citizens'</u> <u>Environmental Coalition</u> or make a request on <u>NEPRIS</u>. Consider all of the levels in a socio-economic model, like the one seen here

 I will invite a member of the Harris- Galveston Subsidence district that will talk to the students about the importance of water conservation.
- B. How can you tweak the lesson to include themes relevant to Houstonians? I will have the students participate in a discussion about Hurricane Harvey, and how they were impacted during this time.

5E Model Lesson Plans Resources (used below): <u>Different Es</u>, <u>Origins of the Model</u>, <u>Videos with Dr.</u> <u>Nancy Moreno</u>. Please describe each component of the lesson, and link applicable materials.

8. Engage:

Prepare for the flooding lesson by having students gather sticks, twigs, small rocks, plants and grass and place in a resealable plastic baggie.

If no class time is available, you may assign the collection of the items as homework the day before. Divide students into small groups and give each a baking tray and soil.

Have students fill the tray three quarters of the way with soil. Have groups create different kinds of water spots in their 'landscape,' such as rivers, lakes, oceans, etc.

Now ask groups to add rocks, grass, twigs etc. to resemble a realistic outdoor scene. Add houses. Students will then with a water bottle, create a flood and look at how it affected the environment. Ask groups to sketch their habitat in notebooks.

9. Explore:

The Essential Question for this unit of study is: How do natural disasters affect people? Students will take advantage of BrainPOP's natural disasters topic to discover where and under what conditions natural disasters are most likely to occur, as well as the impact they have on humans. A discussion following the exploration of the topic will highlight the natural disasters that impact their own lives and those of their corresponding peers.

https://www.brainpop.com/science/earthsystem/naturaldisasters/

10. Explanation:

This is where I will have the guest speaker speak about the different disasters, and explain to the students about the importance of water conservation.

11. Elaboration:

Students will work on an activity called card sort where they will put the correct word with their matching definition. The following vocabulary words are- Flood, earthquake, volcano, tsunami, tornado, and hurricane. On one side of each index card will be the vocabulary term, and on the other side the definition. Students will spread cards apart, and pair them with the corresponding definition.

12. Evaluation:

Distribute one exit ticket to each student. Ask students to explain their solutions to the problem of either a drought or flood and how it could make life better for people.