

## **Planning for the New Normal in Weather Extremes: Getting Kids to Take the Lead in Beginning Informed Discussions with Parents/Guardians**

**Anne Wysowski, St. Bridget School, Language Arts, Grade 6, Two 40-Minute Periods**

**Introduction:** In this two-period lesson, students will use inquiry to identify and support their concerns related to an extreme weather scenario provided to them by instructor. They will then use these questions to write and produce a three-minute video letter addressed to their parents/guardians communicating the importance of this topic as well as the need for the family to be better prepared as more frequent extreme weather events become part of our normal weather experience in the future.

**Geographic Connections:** D2 Geo.9.6-8. Evaluate the influence of long-term human-induced environmental changes on spatial patterns of conflict and cooperation.

**Vocabulary:** climate change, extreme weather, adaptation, preparedness, resilience

### **Content Standards:**

CCSS.ELA-Literacy RL.6.3 - Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how characters respond or change as the plot moves toward a conclusion.

CCSS.ELA-Literacy RI.6.7 - Integrate information presented in different media or formats (e.g. visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

CCSS.ELA-Literacy- W.6.2 – Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

INQ. 6-8.1 – Explain how a question represents key ideas in the field.

**Essential Question:** How does climate change affect us, and how can we prepare for extreme weather events?

**Literacy through Content Area:** Students will use online informational texts and videos to gather key concepts and details about the causes and effects of extreme weather events related to climate change. As they read the novel, *Life As We Knew It* by Susan Pfeffer, students will identify the problems faced by characters and evaluate and judge the responses/reactions of these characters. Students will synthesize what they've learned from both nonfiction and fiction sources to construct questions which will help them work through a "real-life" weather extreme scenario that is likely in their geographic region and one which they have probably experienced before. They will use both written and oral communication skills to share what they've learned.

**Placement of Lesson within Broader Curriculum/Context:** This lesson is the culmination of a novel unit that focuses on climate change and extreme weather. Students will have read the novel *Life As We Knew It* along with numerous articles on climate change and extreme weather specifically readings about preparing for and surviving severe weather. Although global warming is not the cause of the weather anomalies in *Life As We Knew It* (Weather change and natural disasters are a result of an asteroid hitting the Moon and changing its orbit), this novel explores how one family copes and survives catastrophic conditions including a limited food supply, loss of electricity, cold temperatures with limited fuel/heat, isolation and limited news from the government or local community.

**Learner Background:** Students will be adequately prepared for this lesson upon completion of the novel, nonfiction articles, viewing videos, and class discussion.

**Objectives:** Students will be able to formulate the questions that will demonstrate their understanding of extreme weather events and then use these questions to communicate their concerns and create awareness among their family members for lesser climate events that may affect their local community. They will learn what adult tasks are necessary in local climate events, how they can assist adults, and what they can do independently of adults.

**Integration of 21<sup>st</sup> Century Skills:** Students will work collaboratively to focus on a real world problem. They will use critical thinking skills to develop the questions that they must answer in order to communicate their knowledge effectively to the adults in their lives. Technology will be involved in the researching as well as sharing.

**Assessment:** An exit slip formative assessment will conclude the first 40-minute lesson, but a summative assessment will conclude the second 40-minute. Rubric attached for summative assessment (See Appendix B).

**Material/Resources:**

*Life As We Knew It*, Susan Pfeffer, HMH Books for Young Readers

The following articles from *National Geographic.com*:

“What’s Causing Extreme Weather?”

Quiz: Extreme Weather Facts, Extreme Weather Information

“Severe Weather More Likely Thanks to Climate Change”

“Q&A: How to Survive Any Extreme Weather Disaster”

“Blizzard of Nor’easters No Surprise Thanks to Climate Change”

**Lesson Development/Instructional Strategies:**

**Lesson One (40 minutes)**

- Students will be presented with a local weather scenario (See Appendix A) and will need to consider how they might prepare and respond to this weather event using inquiry to do so.

- This will include the development of 12 questions that will illustrate their concerns and understanding about this particular scenario and how it will impact their family.
- Students will be working independently, but will be seated in groups for brainstorming and sharing of ideas including in what ways is my family prepared for an event like the one in the scenario? What are some of the things we need to do to get prepared? What do community leaders need to do? How can I assist my family?
- Instructor will circulate and provide guidance and direction to students. This will act as the part of the formative assessment as students share some of their ideas and questions, or respond to questions from instructor.
- Formative assessment: exit slip: What do you think is the most realistic task that is doable that you developed today and why?
- Students who are ready to move onto Lesson Two will do so.

### **Lesson Two (40 minutes)**

- Students will create a 3-minute video letter to their parents or guardians. (For rubric, see Appendix B.) This message is intended to demonstrate how well students can communicate what they've learned.
- Students should begin by addressing their audience (Mom, Dad, Grandma)
- The purpose of the video letter must be clearly stated: extreme weather events are increasing and our family must be prepared.
- Students must keep in mind: What do I want my parents/guardians to understand about this topic? How can I make my parents/guardians understand that extreme weather events are increasing? What are some specific things my family can do? How can I take what I've learned and become better prepared to face extreme weather?
- Students will include a couple of questions that illustrate their concerns.
- End with a suggestion, recommendation, or a call to action that is doable for them.
- Students will spend the first half of class composing their message.
- During the second half of class students will record their messages with their iPads.

**Differentiation:** This will occur in two ways: Students will create an independent video project while in a collaborative setting. The exchange of ideas will help students who are having difficulty getting started. Students who are ready to move on to the writing during the first lesson will be able to do so. Also, students needing extra time to complete the project will have some accommodations made for them.

## APPENDIX A:

### Extreme Weather Event Scenario:

A blizzard is raging in your area. School and work were cancelled the night before, so your entire family is safe at home this Monday. Forecasts predict 4 feet of snow with winds gusting to 40mph causing drifting snow. All of this will end sometime early Tuesday, but temperatures will remain in the low to mid 20s F all week. Your family was well-informed about the storm, and as a result, Mom did pick up everyone's favorite snacks. However, the Governor of your state has closed the roads to all non-essential workers until Wednesday, the electricity has gone out and won't be back on before the weekend, and school will most likely be cancelled through the end of the week.

- What are your concerns about staying safe?
- What are your concerns about staying warm?
- What are your concerns about staying informed?
- What difficulties does a power outage cause?
- What are the questions you have?
- What are the questions you have for your parents/guardians?
- What do you want them to understand about the frequency of extreme events like this one?
- What are some things you need to do to be prepared?
- How might your family start thinking seriously about this matter.

According to National Geographic, people who survive extreme weather events are well-informed and have a plan. What must you consider to ride out this blizzard?

## APPENDIX B

### Rubric for 3-minute video letter to your parent/guardian

You are now the expert, so explain to your parents why they should be concerned about severe weather events. What do you want them to understand?

A good video letter includes:

- Student acknowledges audience (Hi Mom, or Dad, or Guardian)
- Reason for letter is clearly stated
- Student shows grasp of topic
- Ideas are organized
- Speaks clearly and in complete sentences with all words pronounced correctly
- Approximately 3 minutes in length
- Student expresses passion for topic
- Video letter ends with a suggestion, recommendation, or call to action that is doable for student.