### Navigation of the Hyperlinked Weather-Climate Concept Map

#### Jane Heinze-Fry March, 2020

This is a multi-level resource. So let's explore how to get to the parts you care about.

## Level 1. Introduction to Learning about Climate Change: Causes, Impacts, Solutions.

This is the homepage, the only level that is read left to right rather than top to bottom. The CAUSES (including human and natural contributions) of CLIMATE CHANGE create IMPACTS (on human and Earth Systems), have SOLUTIONS (through civil society and sustainable development.)

• Linked to the small blue "Introductory Resources" box below the "Climate Change" box are many linked overview resources to begin to build an understanding of climate change.

• Or you can explore any of the bubbles more deeply. Just click on the small box(es) at the bottom of the bubble of interest, then click on one of the titles in the list of resources that appears. The icon on each box indicates the type of resource (text, image, text with image, or concept map). The chosen resource will open up automatically. When you are finished with the resource, simply click the red button in the top left corner, and the resource will close and take you back to the map.

• The bubbles with miniature concept map icons allow you to open up the more detailed *levels* of the resource. For example, when you click on the concept map icon of the Earth Systems bubble, a concept map of Earth Systems becomes visible. Explore as much as you want: Atmosphere, Hydrosphere, Biosphere, Lithosphere.

• If you want to share any of these concept maps with others, you may view them as a web page by clicking the "View as Web Page" rectangle at the bottom left of the map. Then simply send the URL to a friend or colleague.

### Level 2. Finding Solutions to Climate Change Challenges

Let's move on. Perhaps you KNOW enough about climate change and are ready to find solutions to the many challenges. Move to Level 2 by clicking the small concept map icon at the bottom of the Solutions bubble.

• If the map is too small, you can hit the green button in the top left bar to go to full screen.

• Notice that the upper part of the map targets both mitigation and adaptation strategies. Both will be needed.

• The lower part of the map highlights various parts of the community who bring different perspectives to the problem. Climate change is one of the so-called "Big Wicked Problems." Addressing climate change will take collaboration among all of us.

#### Level 3. Climate Change and Energy Education

This level is intended for educators. Those who see "Education" as their principle way of addressing climate change, should go to Level 3 by clicking the small concept map icon at the bottom of the Education Systems bubble. Within the educational system, people may function on different areas of interest.

• The Darker Blue bubble resources focus on Learners: emotional, conceptual knowledge, and behavior with an additional focus on misconceptions.

- The Green bubble resources target both formal and informal teachers.
- The Yellow bubble resources target Curriculum coordinators and Department heads.

• The Dark Orange resources target those in state education departments. Here are links to K-12 weather/climate strand maps particularly useful for those interested in vertical integration.

• Light Orange: Context: ESL and psychology, sociology factors that may affects learning.

• The Lighter Blue bubble on the right has a selection of climate change education research resources.

### Level 4. Especially for Teachers

Let's go deeper for resources particularly collected for teachers. Click on the small concept map square at the bottom of the Green "Educational Leaders" bubble to go to Level 4. Enjoy exploring the bubbles here. Here are linked resources to develop units and programs; best practices; instructional strategies; and assessment and evaluation methods.

• At the bottom of this concept map are linked three remaining detail concept maps which may be particularly useful to you. Access each by clicking on the small concept map icons at the bottom of the bubbles.

### Level 5. Detail Focus: Interdisciplinary, Science Practices; Levels of Students

Now you have found your way to resources that may be of particular value to you:

• Interdisciplinary Educational Connections: this is for people who are ready to reach across the silos and work together for the good of the community. Here you will find climate change education resources that reach across the curriculum. Note that Natural Sciences has one last submap. • A second sub-map emphasizes the science and engineering practices which are so important to the development of Next Generation Science Standards (NGSS) and the most recent resulting state standards.

• The last submap divides resources by grade level: Elementary, Secondary, College, Adult, and a special section for deniers.

#### **Moving Between Levels**

# *Note:* You may move between levels by pressing the backward and forward arrows in the top left corner of the maps.

I hope you enjoy your journey here and share appropriate sections with interested friends and colleagues. Let me know how it goes for you at jahfry@rcn.com